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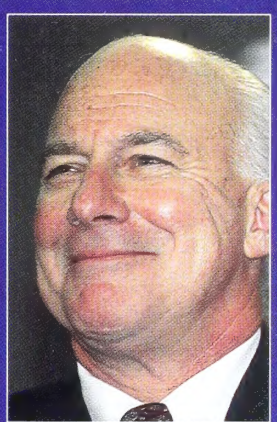
BusinessWeek

6, 1998 A PUBLICATION OF THE McGRAW-HILL COMPANIES $3.95

TELECOM UNBOUND

How the AT&T-TCI DEAL will change the entire landscape

TCI's John Malone



AT&T's Mike Armstrong

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The inside story of his final days

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A report card on our column

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The world's largest computer maker is you-know-who. And now you know another leader, too. That's right, Fujitsu. We're a global maker of everything from tablet, notebook and desktop PCs to workstations, servers, supercomputers and software. We also make a full line of computer peripherals including high capacity disk drives, magneto-optical removable storage, tape cartridge back-up systems, high volume document scanners and workhorse printers. Why are we telling you this? Because we fully expect you'll be seeing more and more of our products in your business. And when you do, we don't want you to wonder, "Fujitsu who?"

FUJITSU

COMPUTERS, COMMUNICATIONS, MICROELECTRONICS

BusinessWeek
JULY 6, 1998

COVER: TELECOM UNBOUND

The combination of AT&T and TCI may mean communications services limited only by the imagination

page 24

(L TO R) COVER PHOTOGRAPHS BY LARA JO REGAN/SABA, JAMES LEYNSE/SABA, COVER INSETS BY CLAUDIO EDINGER/SABA (DUNLAP), SUSUMU TAKAHASHI/REUTERS (RANK). PHOTOGRAPH ABOVE BY JAMES LEYNSE/SABA

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What kind of services will AT&T-TCI be able to provide? Just imagine: Video voice mail will be a cinch. Phones will be hooked up in moments. Electronic commerce is likely to flourish, as TV melds with the Net. And the implications for AT&T's rivals will be profound. High-speed connections to the home will be 20 to 30 times faster than what the Baby Bells and GTE are providing. If the combine flies, it may be a whole new world for communications

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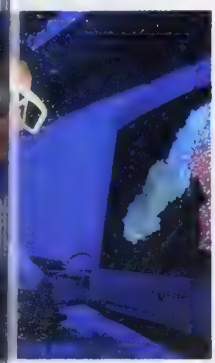

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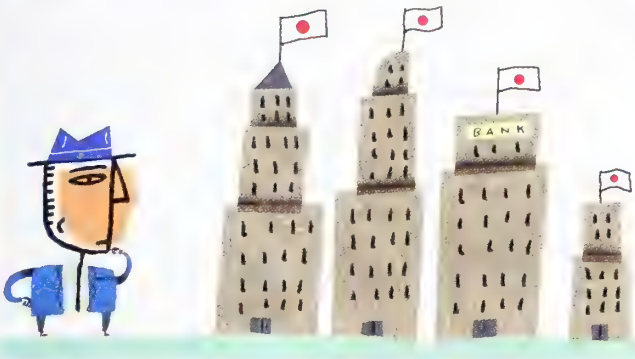

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Up Front

EDITED BY MARCIA STEPANEK

TALK SHOW "The technology gap is causing a tremendous potential for social conflict, and it is cri not to dismiss such concerns."

—Ex-Soviet leader Mikhail Gorbachev, warning a confere on information technology about the new haves and have-nts.

MAD AVE

THE NFL BENCHES QUICKIE ADS

IT COULD BE A WHOLE new ball game this fall—thanks to a new twist in the National Football League's 1998-99 season contract with broadcasters. Pressed by top sponsors, the NFL will cut the number of video "vignettes" during breaks in game action, ending quickie in-game ads like McDonald's "Game Break" and Alcoa's "You Make the Call."

These minispots were stealing too much thunder to suit official NFL sponsors, each of which pay up to $25 million a season for the right to advertise during games and use the NFL logo on their products. Sprint Promotions Manager Pam Kramer called the in-game vignettes "a competitive ambush. They created confusion as to who the official sponsor was."

MORE ACTION, *less trivia*

The offending vignettes will now be limited to run only before and after the games or during halftime. McDonald's says it is reviewing the new NFL rule and doesn't know what will become of its "Game Break." Neither Fox nor ABC would comment, but sources say the networks will be given extra commercial breaks worth up to $1 million a game to help make up for lost revenue. The result: Fans may get hit with fewer commercials—or may not even notice. *Lorraine Woellert*

FIRST FAMILY

WAS THIS WHITE HOUSE BUG ALL BUZZ?

IT WAS AN ADVERTISING COUP for Volkswagen that sounded too good to be true: A report that Bill and Hillary Clinton bought daughter Chelsea a new 1998 Beetle, in black.

Turns out it was too good to be true. Marsha Berry, Mrs. Clinton's press secretary, told BUSINESS WEEK there is no First Beetle. The report was first put out in June by Internet gossip-hound Matt Drudge, then picked up by newspapers from San Diego to New York—even prompting Big Three lobbyist Andrew Card to say he wished Clinton had bought American, instead.

But Drudge, who broke the Monica Lewinsky scandal, is also standing by his Beetle story. He s was tipped off by a but won't name his sou

vw, for its part, is stopping the rumors the Beetle really n more publicity. Spokesv Karla Waterhouse, Berry's denial, had said swagen believed "Chelsea's parents bought her a Beetle. I it's pretty cool that Ch got one." Even now, th Waterhouse is reluct change the company line much. "We don't want terfere with the Clinton vacy," she says. The House, however, is ins that this is a bug that s be squashed. *Owen Ull and Bill*

THE LIST **BUILD LOCAL, SELL LOCAL**

CHINA: *Future drivers?*

It's no wonder General Motors is rushing headlong to invest overseas. Despite recent UAW accusations that GM is "putting America last"—simply opting for cheaper labor overseas—there's another factor involved. In China, for example, there is only one car for every 200 adults.

COUNTRY	PASSENGER CARS (MILL.)	GDP PER CAPITA*	ADULT POPULATION (MILL.)	CARS PER 100 ADULTS
CHINA	4.7	669	891.0	.5
THAILAND	1.5	3,061	44.0	3.4
BRAZIL	12.8	5,046	113.0	11.3
ARGENTINA	4.8	8,428	26.1	18.4
HUNGARY	2.3	4,392	8.2	28.0
U.S.	129.7	28,725	207.0	64.1

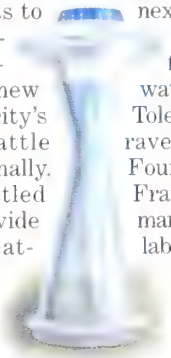
US $ per person 1996 FIGURES

DATA: AMERICAN AUTOMOBILE MFGRS. ASSOC., STANDARD & POOR'S "WORLD ECONOMIC OUTLOOK," U.S. CENSUS

CIVIC PRIDE

HAVE ANOTHER SIP OF SEATTLE

RAIN AND SEATTLE ARE synonymous. Now, the Seattle City Council wants to capitalize on that connection. Council members are mulling a new plan to bottle their city's water, label it Seattle Rain, and sell it nationally. Revenues from bottled water sales could provide relief to miffed Seattleites—and even fund a new local project to protect salmon habitat.



Residents have long complained about their water bills. The water fee has been rising 9% annually, fueled by the demands of a popu influx. Revenues from fees are used to maintai city's pipelines. If approv a consultant later this mer, Seattle Rain could selling nationally as ear next year.

Seattle is not first city to mark water. Ohio sells its Toledo label, Kansas raves about its Cit Fountains brand, and Francisco is thinking marketing a Hetch He label, named for a r voir in Yosemite tional Park. Seattle pols their product is ly special. In they say, the secret of tle's success just might the water. *Seanna Bro*

Things we've noticed about Americans:

Going places is a national obsession.

…en there, 1969. ← CASE IN POINT: → The reliable Chevy Malibu.

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Up Front

CLASS OF '98

EVEN MORE BOOTY FOR MBAs

THE ECONOMY HAS BEEN very good to MBA grads this year. Officials at top-tier business schools report that 1998 graduates typically pulled in two or more job offers—and, once hired, locked in base salaries in the $75,000 to $80,000 range. That's up 7% to 9% from 1997—not bad for a twentysomething.

Of BUSINESS WEEK's Top 10 schools, Northwestern's Kellogg School of Management reported the highest average base salary for graduates—$90,000. Bonuses also were impressive: Duke University's Fuqua School reported average sign-on money of $18,100 and a guaranteed bonus (after one year) of $19,100—on top of a $79,500 average base salary. Add it all up, and that's a $116,700 package, an increase of 17% over last year. At Northwestern, the average $130,000 package jumped by $15,000. New York University's went up 27%, to $117,237.

One top perk: tuition reimbursements for MBAs who took jobs by Jan. 1, 1998. With big bucks like these, $25,000-plus schooling costs at top-tier institutions almost seem like a bargain. *Joan Oleck*

YOUNG BUCKS
Average salaries for '98 MBAs at select BUSINESS WEEK B-schools.

NORTHWESTERN	$90,000
STANFORD	85,000
MIT	83,800
DARTMOUTH	82,400
CHICAGO	80,000
VIRGINIA	78,000
MICHIGAN	75,500

*median figure

DATA: SCHOOLS; HARVARD UNIVERSITY, THE UNIVERSITY OF PENNSYLVANIA, AND COLUMBIA UNIVERSITY DECLINED TO PROVIDE NUMBERS

PAPER PLAYS

ONE MORE REASON TO AVOID IPOs

CHANCES ARE, THAT IPO THAT once looked like a winner is now depressing your portfolio. While many factors determine how an IPO fares, new research confirms a long-standing suspicion: Many companies, before going public, fudge their numbers so as to appear more profitable.

In a study to be published in an upcoming issue of the *Journal of Finance*, a trio of finance professors found that many companies manipulated their profit statements, in some cases shifting costs from present periods to future ones. Then, when reality caught up with the aggressive accounting, share prices suffered. The researchers examined how 1,649 companies that went public in the 1980-92 period accounted for their profits. They divided the companies into four groups, ranging from those with the most aggressive accounting practices to those with the most conservative ones. The result? Three years after the IPO, total returns among the most aggressive group were 20% below those of the most conservative one. Says co-author Ivo Welch of the University of California at Los Angeles: "Unless you are a very sophisticated investor who spends a lot of time reading all the details, stay away from IPOs." *Robert Barker*

Portfolio Poopers

COMPANY	IPO PRICE	RECENT PRICE
CLEVELAND INDIANS	15	11⅞
EARTHSHELL	21	10⅛
HAUBEN	11	6
STEELCASE	28	24⅞

DATA STANDARD & POORS

DRAWN & QUARTERED

I-WAY PATROL

STOP AND DOWNLOAD THE ROSES

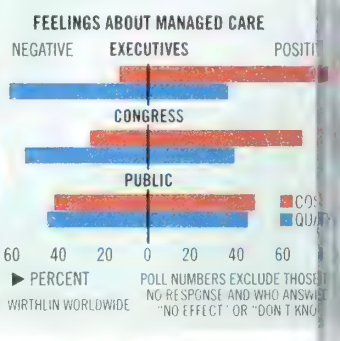
WANT TO BUY YOUR LOVED one another Porsche or a new mansion but can't afford it? Send a picture of one instead.

Sound ridiculous? Not to people who visit the growing number of "virtual" flower and big-gift sites on the Web. There, cash-short shoppers can send images of practically anything—even a digital bowl of chicken soup—in lieu of the real thing. Just type in an E-mail destination, and faux favors are zapped in minutes.

According to Net commerce analysts, the nev of virtual.com sites repr one of the hottest tren Web advertising. "Noti off-limits, except X- material," says Mostafa frawy, an executiv Philadelphia-based Cyber which designs site retailers called ri meal, which s up cyberfar Retailers to whet vi appetites e so that m they'll splur the real thing success—like perfect gift—can the eye of the beh Virtualflowers.com de some 8,000 image-bou daily—but only about 4 ones. At least for s pollen is still preferab pixels. *Tammy*

THE BIG PICTURE

MANAGED CARE: A MIXED BLESSING Even mor than the public or lawmakers, executives are of two minds about managed care. They love its cost saving but blast its quality.



FOOTNOTES U.S. retail sales of gourmet chocolate products in 1997, $740 million; projection for 2002, $1.6 billion

DATA F

ow Microsoft is using Clarify to get a clear view of its customers.

Mark Perry, General Manager, Worldwide Support, Microsoft

Microsoft is the worldwide leader in software for personal computers. Mark Perry's mission is ensuring the long-term success of its customer relationships.

"Our goals are straightforward: find out what our customers need and make sure they're successful. That's our number one priority. Clarify simply has the best solution to meet our business objectives. They realized that this would be a long-term relationship, and worked really hard to make our project a success. Now we can see each customer individually. With Clarify we can tailor our interactions to each customer's needs, and be more proactive in helping them make decisions about the future. So they're much more loyal. Everyone wins."

Clarify's front office solutions automate processes in sales and marketing, customer service, field service and logistics, quality assurance and help desks.

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Readers Report

EDITOR'S MEMO

THE HOT BOOK IN HIGH TECH

The high quality of BUSINESS WEEK's technology coverage is well-known. We devote more people and pages to high tech than any other magazine this side of the computer books. And we earn more editorial awards.

This year, we have won two high honors in the Computer Press Awards, administered by the Computer Press Assn. and the Medill School of Journalism at Northwestern University. No other general business magazine was even a finalist.

WINNER: *For best individual feature*

In the general-interest-publication category, BUSINESS WEEK won on the basis of three cover stories: "The New Business Cycle," an analysis of how information technology drives the economy; "Silicon Valley," our summer double issue on the dynamic region that has become synonymous with innovation and information technology; and "The Digital Frontier." This last piece, a look inside the to computer labs, also won for best in dividual feature.

Other journalism awar have honored "The Biote Century," a cover story quickly following the an- nouncement that scientis in Scotland had cloned a sheep. The story earned the Deadline Club Award for best magazine news r porting, presented by the New York City Chapter the Society of Profession Journalists. It also won a print journalism award from the American Institute of Bio logical Sciences.

As always, the real winner is yo the reader.

Stephen B. Shepard

Editor-in-Ch

A PRECISE WAY TO HEDGE THE DOW

If your readers are considering put options that "let you stay in the market with the stocks you like, secure in the knowledge that you can't be wiped out if the Dow Jones industrial average heads south," you gave them the second-best advice ("A safety net for your nest egg," Midyear Investments Outlook, June 15).

If you want to hedge against a DJIA decline, put options on the Dow itself would be the vehicle of choice. Options on the Standard & Poor's 500-stock index, which you recommended, would be better for The McGraw-Hill Companies, publisher of business week and owner of Standard & Poor's but otherwise a precisely targeted solution.

David E. Mc
Presi
Dow Jones Ind
New Y

DON'T OVERLOOK THE TERROR IN TIBET

Your essay, "Don't let Cong shanghai China policy" (Economic V point, June 15), was troubling. It see to suggest that congressional con about human rights in China was m ly a "short-term political current" o "annual brouhaha" and that Cong should focus only on promoting tr You implied that, at this juncture

Business Week
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IRECTIONS & CLARIFICATIONS

ɔle accompanying "A way to wellness—limits" (Personal Business, June 22), :h ran in some editions, gave an incor- address for the National Institutes of th Office of Alternative Medicine Web :. The correct address is ied.od.nih.gov.

ry, anything else is a distraction. have just returned from Tibet, e people cannot speak, write, trav- ssemble, or practice their religion r. I do not believe that it is possible ıe U. S. to maintain a stable trade r with a government that can spon- he brutality China is currently in- ıg on Tibet. Most Americans still gnize that there are values more rtant than greed. It's fundamental ır history and culture: We stand ı bullies. We don't subsidize them.

Edward C. Fargis
New York

ADA'S PUBLISHERS JUST D A LEVEL PLAYING FIELD

ıe crux of the matter in "Does ıdian culture need this much pro- ɔn?" (News: Analysis & Commen- June 8) is that the measures in : today were instituted to ensure ıble Canadian publishing industry, cularly for publishers of trade and ımer magazines.

ven their average profitability of ır 5%, most Canadian publishers ld find it impossible to compete ıst U. S. publishers. Using U. S. ed- al content, art, and photography, Yanks could undercut advertising s charged by Canadian publishers—editorial equivalent of dumping. n erosion of advertising revenue ld probably wipe out the industry. adian publishers are not seeking ection from competition but want ısure a level playing field. Without sures to provide for that, Canada ld be awash in regurgitated U. S. ɔrial and have no further basis for a umer- and trade-magazine publish- industry of its own.

Paul Plesman
President & CEO
Plesman Communications Inc.
Toronto

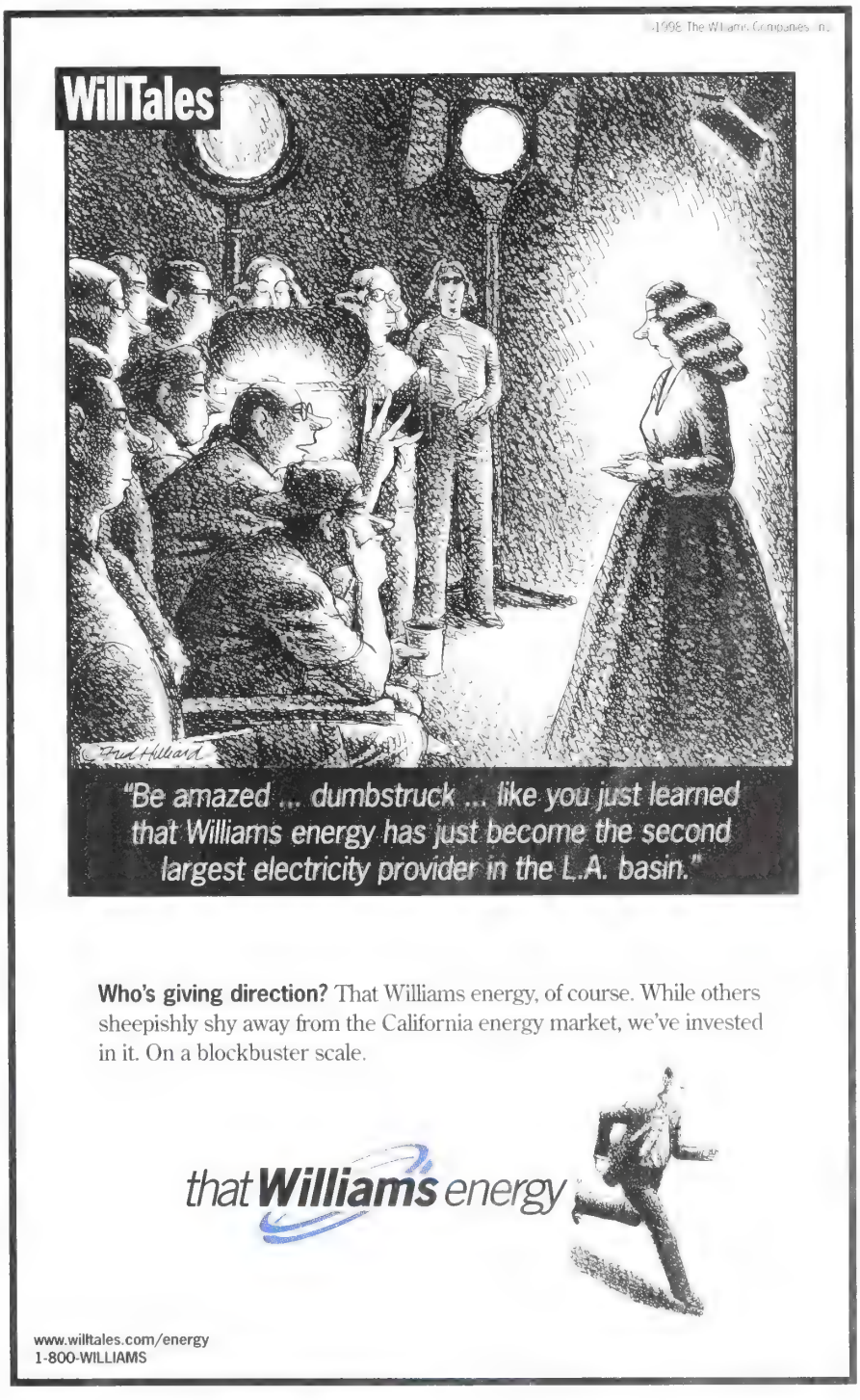
K WELCH: ROLE MODEL RASCAL?

disagree with the closing analysis of w Jack Welch runs GE" (Cover Sto- June 8), which leaves the impres- that General Electric Co. will not prosper without Welch as Chief Executive Officer. This could hardly be further from the truth.

Jack Welch does not motivate people. People motivate themselves. No single person can take a company from $12 billion to $280 billion by himself. It takes an army—such as the army that Jack has built by creating an environment that attracts and retains the best and the brightest. Jack's legacy will not be his ability to motivate, it will be the environment he has created, one that will prosper beyond his time at the helm.

Mike Higgins Jr.
Prairie Village, Kan.

I was struck by the similarities between Jack Welch and my grandfather, Walter Hoving, chairman of Tiffany & Co. for 25 years. I was also struck by the differences. I wondered what Walter Hoving would have done if he had been told his company was responsible for creating 81 toxic Superfund sites across



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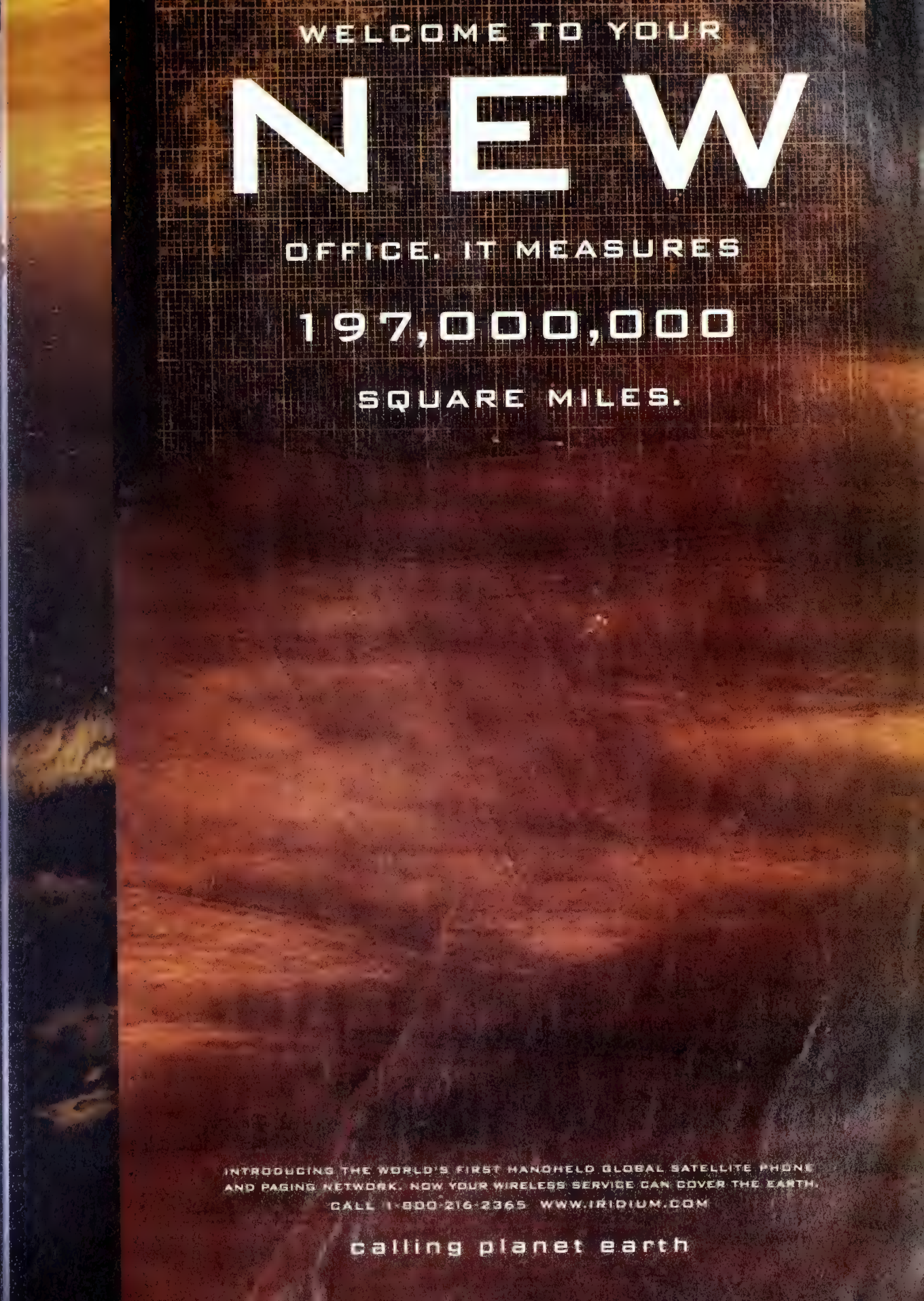
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on page 92

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Council on Family Health
A public service by the manufacturers of medicine

Readers Report

the U.S. through PCB contamina

Would he have launched a publ lations campaign downplaying the city of fish tainted with PCBs, a pound banned worldwide? Woul have spent large amounts of share er money on a lobbying campaig amend the federal Superfund la limit industry liability for the cos toxic cleanups?

I think not. My grandfather's sen responsibility to the country he love cluded a moral conviction to do wh right. Welch epitomizes the stereoty corporate leader whose sense o sponsibility is driven by the short- bottom line. The things that ins many of today's business leade greatness are a sad departure what made business leaders gre my grandfather's time.

John Ho
Garrison,

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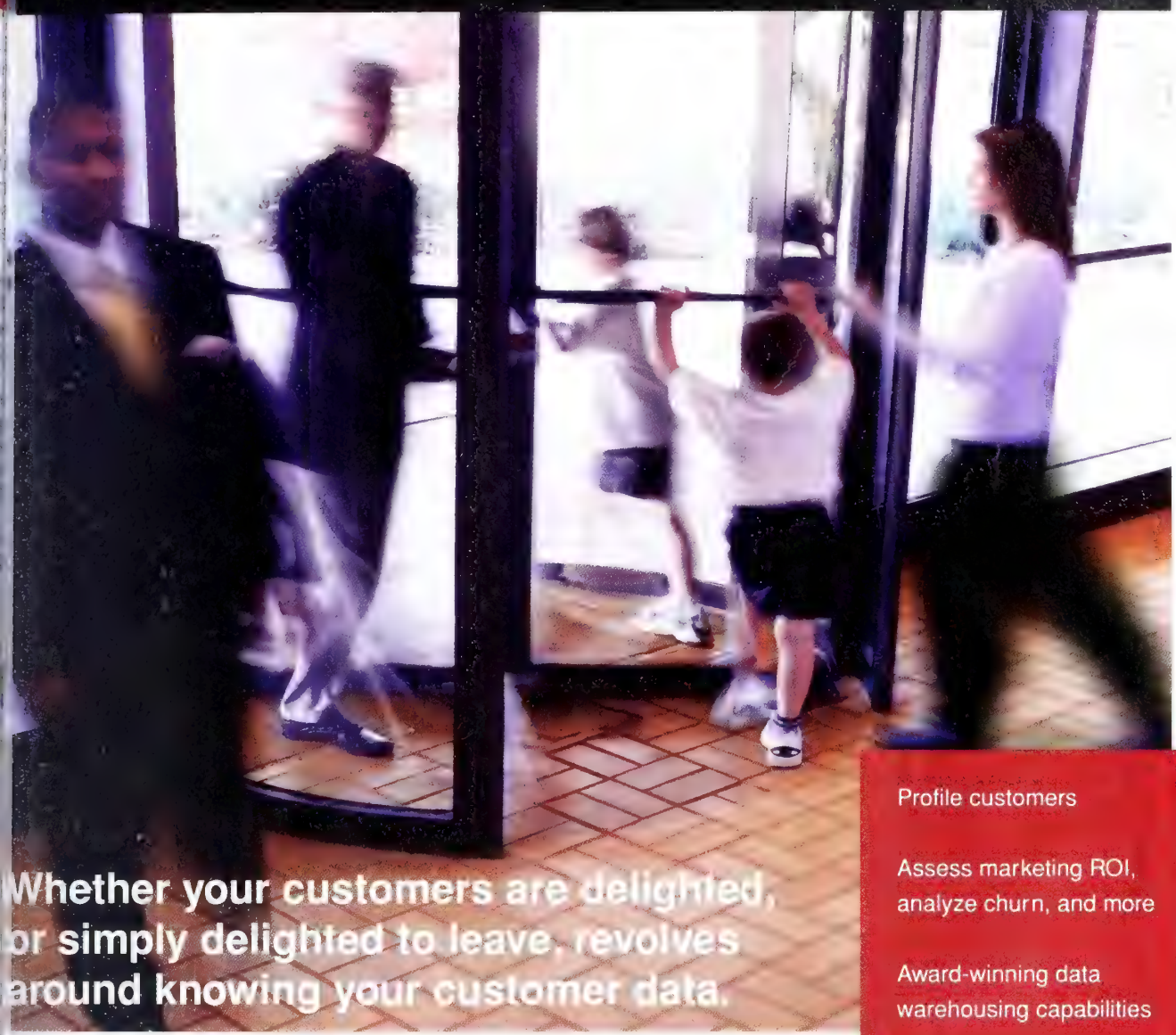

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SOMEONE ELSE'S HOUSE
America's Unfinished Struggle for Integration
By Tamar Jacoby
Free Press • 614pp • $30

WHAT WENT WRONG ON THE WAY TO INTEGRATION

In one of the well-crafted stories that make up Tamar Jacoby's misguided book, Barry Gottehrer, New York Mayor John V. Lindsay's white ambassador to black New York, worries about the approaching summer of 1967, hoping to prevent the riots that have rent other American cities. "What were [those riots] about exactly?" wonders Gottehrer. "How much was targeted protest, how much sheer frustration and unappeasable rage?"

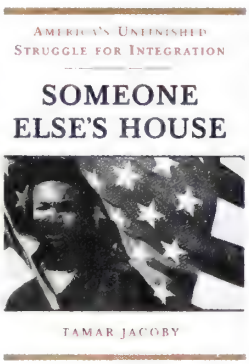
Lindsay and his team, writes Jacoby, "fell back on their own conventional political assumptions: deciding that riots... were meant to express specific gripes about ghetto conditions—and that they could be prevented if the city addressed those legitimate demands." Judging the Lindsay administration tragically naive, she says: "It did not occur to [them] that much of the leadership in the ghetto might be beyond reasoning, beyond negotiation or even pragmatic goals."

The tale is emblematic of much of what Jacoby has to say in *Someone Else's House*. What happened to integration? It was killed by black rage and demagoguery and by white liberal conciliation, says the former *New York Times* editor, now a fellow at the conservative Manhattan Institute for Policy Research. There's also a policy critique: Jacoby lauds integration but holds that "the old stratagems," such as affirmative action, "have proved bankrupt or worse." It's an increasingly popular analysis. Unfortunately, it gives short shrift to such factors as deindustrialization, and it substitutes finger-pointing for solid policy recommendations.

Jacoby focuses on the complex stories of race politics in three American cities—New York in the 1960s, Detroit in the 1970s, and Atlanta in the 1980s—through the ups and downs (but mostly downs) of their mayors.

In New York, as the author sees things, Lindsay—in office from 1965 to 1973—applies charisma and good intentions to bring City Hall closer to the black ghettos. But when these fail him, he submits to appeasing black nationalist hotheads, alienating the white working class, and delivering city schools to community-control militants.

The tenure of Coleman Young, Detroit's first black mayor (1973-93), was a test of how much difference black leadership can make. Not much, Jacoby concludes, because "whether for political reasons or out of deep-seated personal antagonism, he couldn't seem to help fueling the city's racial hostility." As crime rises, Young promotes black cops, then cuts back on police; as whites flee, he proudly declares Detroit a black metropolis. By the time the Renaissance Center, the city-saving vision of some white businessmen, goes up, it is already doomed: In the first five years, the center bleeds $130 million in operating costs.



Atlanta, to many an exemplar of integration, is for Jacoby a model of the toxicity of affirmative action. When a multimillion-dollar airport project adds butter to the fat economy, Mayor Maynard Jackson (1973-81 and 1989-93) implements a "set-aside" program guaranteeing a share of the construction work to black companies. Aimed at generating work throughout the black community, the program—which still governs Atlanta's public works—enriches a few already wealthy black men, along with whites who illegally procure contracts using black fronts.

Perhaps these mayors were flawed leaders. But their cities faced catastrophes that Jacoby skims past, such as the decline of industry, which devas[tated] both low-paid black workers in N[ew] York and high-paid unionized one[s] Detroit, and bone-deep federal bu[dget] cuts. As for Atlanta's debacle, nei[ther] Jackson nor affirmative action ca[n be] held to blame for those time-hon[ored] roadblocks to black advancement, c[orro]privilege and corruption.

Jacoby calls these mayors' solut[ions] wrongheaded and piddling. Lindsay, [for] instance, threw money at recreatio[n to] cool down ghetto youth instead [of] spending on jobs. The author someti[mes] implies that solutions going too fa[r] color don't go far enough on cash: C[or]porations have found affirmative ac[tion] "cheaper... than massive programs [to] rebuild the ghetto, wholesale job tr[ain]ing or revamping the public scho[ols]. Yet she rejects such programs. Inste[ad] she favors the usual scattershot con[ser]vative remedies, such as private ho[me] loans, which can't address the c[ore] shortage of moderately priced hous[ing], and school vouchers, wh[ich] sap public schools of taler[ted] students and funds.

To help themselves, p[oor] blacks should act more c[ivi]ly, Jacoby urges. They n[eed] "acculturation," she repe[ats] frequently, to the values [and] behaviors of the "ma[in]stream." As for leaders[hip], she applauds New Y[ork] Mayor Rudolph Giuli[ani], whose stern law and or[der] policies have won over [the] "black silent majority," she says. [But] she cites figures showing that only [1%] in three black New Yorkers called [his] first term a success.

Many experts left and right ad[mit] that both affirmative action and [a] strong economy have contributed to [the] impressive shift of blacks into the m[id]dle class. Still, preferences and pr[os]perity are leaving the poorest—includ[ing] too many blacks—behind. This fact, [and] rage about it, can't be chalked up [to] "hate-whitey" brainwashing. The p[ath] to equality won't be blazed by rioters [or] demagogues. But neither will it be [by] those who underestimate the legitim[acy] of their grievances.

BY JUDITH LEV[INE]

Levine has written about r[ace] and sexuality for many natio[nal] publications.

JACOBY FINDS FAULT WITH AFFIRMATIVE ACTION BUT HAS LITTLE TO OFFER IN ITS PLACE

THE BUSINESS WEEK BEST-SELLER LIST

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Reviews and more are available on **AOL** (Keyword: BW) or **www.businessweek.com** (Click on BW Plus!)

HOT TYPE One sign we live in contentious times is the evergreen popularity of *Getting to* ; this month's No. 12 paperback and a regular on the BUSIS WEEK Best-Seller List for more than three years. Against backdrop of the feverish strike at General Motors Corp., how-to-negotiate primer seems well worth revisiting. Authors Roger Fisher, William Ury, and Bruce Patton assert it bargaining should not consist of haggling over opposing sitions, such as precise dollar figures. Whether talks center the value of an antique or the status of hostages, negotors are more likely to get results from "principled negotions," they say. This approach involves "focusing on basic erests, mutually satisfying options, and fair standards."

Once the parties have identified each others' underlying interests—fairness, say, or stability—and brainstormed in a search for creative options, they are more likely to reach agreement. The biggest problem for the authors, all of whom have taught negotiation at Harvard University, lies in their notion that solutions can be found in "objective criteria." In the end, there are no such things: Wage standards, for example, reflect both momentary power relations—such as unions' political strength—and ephemeral demographics, such as the size, education, and age of the labor force. All the same, *Getting to Yes* has sufficient wisdom to merit several more seasons of best-sellerdom.

BY HARDY GREEN

BY STEPHEN H. WILDSTROM

NOW, SCANNERS ARE A SNAP TO USE

And the latest models are more versatile, thanks to their drag-and-drop software

Using computers to edit or play with pictures has become increasingly popular. But the first step, getting images into digital form, has been anything but fun. A new class of cheap, easy-to-use color scanners for Windows computers is at last making it simple to turn your snapshots into images that can be printed, incorporated into craft projects, E-mailed, or posted on a Web site. You can utilize the scanner to make quick copies, convert printed documents into text that can be edited in a word processor or sent out over a fax modem.

Scanners come in two basic varieties, sheetfed and flatbed. Sheetfed scanners use motorized rollers to draw paper past the light sensors that create the digital image. Their main advantage is that they take up little room. But they are less versatile than flatbeds and are more prone to errors. A flatbed is basically a box with a hinged cover over a sheet of glass. Material is placed on the glass, just like on an office copier. The flatbed scanner can handle books, magazines, and other bound documents.

The Visioneer PaperPort OneTouch, a flatbed, may be the most convenient scanner I have used. It connects easily to a printer port, and you can plug your printer into the scanner when you want to use both. The OneTouch comes with Visioneer's excellent PaperPort software, which provides drag-and-drop handling of items you scan in.

When you scan an image, a thumbnail version of it appears on the desktop. You can sort images into folders. PaperPort then lets you drag an image of a text page to your word processor. The program uses optical character recognition software to create a document that your word processor can handle. Drop an image on the icon of Adobe PhotoDeluxe or other image-editing program, and the application launches with your picture open.

To make things even easier, the OneTouch offers several buttons. One begins a scan and opens the PaperPort software. Another button sends the scan directly to a printer, effectively creating a copy machine. A third sends the scan to the fax software you designate. And a fourth, labeled "custom," can connect to the link of your choice.

The Agfa SnapScan EZ, as befits the camera and film heritage of its maker, seems ideally suited for photographic work. Like the OneTouch, it can scan up to 1200 dots per inch vertically and 600 DPI horizontally. For photo work, the more dots, the better the results. But h dot concentration, or res tion, alone can be misleac I found I got consiste better photo scans with Agfa than the Visioneer. It machines can scan at lo resolutions, which allows faster scanning and cre smaller files.

EASIER INSTALLATION. big advantage of the S Scan is in the FotoSnap s ware it uses to control scanner. FotoSnap make simple to fit the p cessing to the use will be making of images. An image tined for a photo-qua printer will automatic be read at the highest sible resolution.

The Storm PageScan is an inexpensive, sheet device best suited to ente documents for such thing faxing, quick copying, or scanning photos for on purposes, since its 300 resolution is low for seri photo work. The PageSc distinction is that it is first of a coming flood of s ners to use the new unive serial bus connection on c puters, making installat easier. It also avoids problems some printers h in sharing a port with an er device.

Whether you go for on these scanners or a comp tor from companies such UMAX or Mustek, choos the right image-managem software will make thing lot easier. In addition to sioneer's PaperPort (whic also available in a Macint version), Xerox' Pagis Pr good at managing your sc and dispatching them to er applications. If your sc ner doesn't come bund with one of these, you'd well to spend $50 for a c

Not that long ago, sc ners were considered ex equipment for specialists. I suspect you'll find that a using one for a few d you'll wonder how you along without it.

A Trio of Scanners

SCANNER	TYPE	RESOLUTION	PRICE
VISIONEER PAPERPORT ONETOUCH (800 787-7007 or 510 608-6300)	Flatbed	600 x 1200 dots per inch	$250
AGFA SNAPSCAN EZ (301 440-2500)	Flatbed	600 x 1200 DPI	$199
STORM PAGESCAN USB (888 438-3279 or 650 969-9555)	Sheet-fed	300 x 300 DPI	$120

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BY LAURA D'ANDREA TYSON

WASHINGTON CAN'T KEEP HIGH TECH TO ITSELF, SO WHY TRY?

NO-GAINER: Do satellites and supercomputers have military uses? Sure. But a U.S. ban on exports would only drive global customers to competitors

What do flat-panel displays, supercomputers, microprocessors, and communications satellites have in common? They are technologically sophisticated products with substantial military and commercial applications. These products provide the modern "brick and mortar" of our nation's military. For consumers, they mean such marvels of late 20th century life as wireless communications, live television broadcasts from around the world, and virtual-reality games. And for producers and workers, they provide high-wage, high-productivity jobs and rapidly growing markets at home and abroad.

But the fact that such products can be used for peaceful and bellicose purposes poses a major policy dilemma: how to prevent them from falling into the wrong hands and endangering national security. The flat-panel displays used in computer-aided design can be used for tracking tank movements. The telecommunications satellites used to broadcast the U.S. Open can be used to transmit coded military messages. Rockets used to launch satellites can be mounted with nuclear warheads.

Banning the exports of dual-use products to potential foreign adversaries might appear to be the simplest way to safeguard our national security. But this approach is both ineffective and counterproductive. The U.S. is not the only source for such products, so a unilateral ban only serves to drive global customers to competitors. Unilateral export controls, like unilateral economic sanctions, don't work. Washington should stop making foreign policy decisions in the vain hope that such measures can be effective.

INNOVATION EFFECT. Indeed, such export controls would endanger the very national security objectives they are designed to safeguard. America's military strategy rests on its superiority in high-tech weaponry, and that in turn depends on the military's access to state-of-the-art technology. For some military projects—stealth bombers, for example—this requires dedicated military suppliers producing small quantities of high-cost components in accordance with detailed military specifications. But the military also makes use of vast amounts of dual-use products, and it benefits from the lower prices and technological innovations fostered by commercial competition.

Proponents of export controls argue that when faced with a choice between comm objectives and national security obje we should choose the latter. Of course. I many products, national security hing the success of U.S. companies in the mercial marketplace. Unilateral expor trols undermine this success and ulti imperil national security.

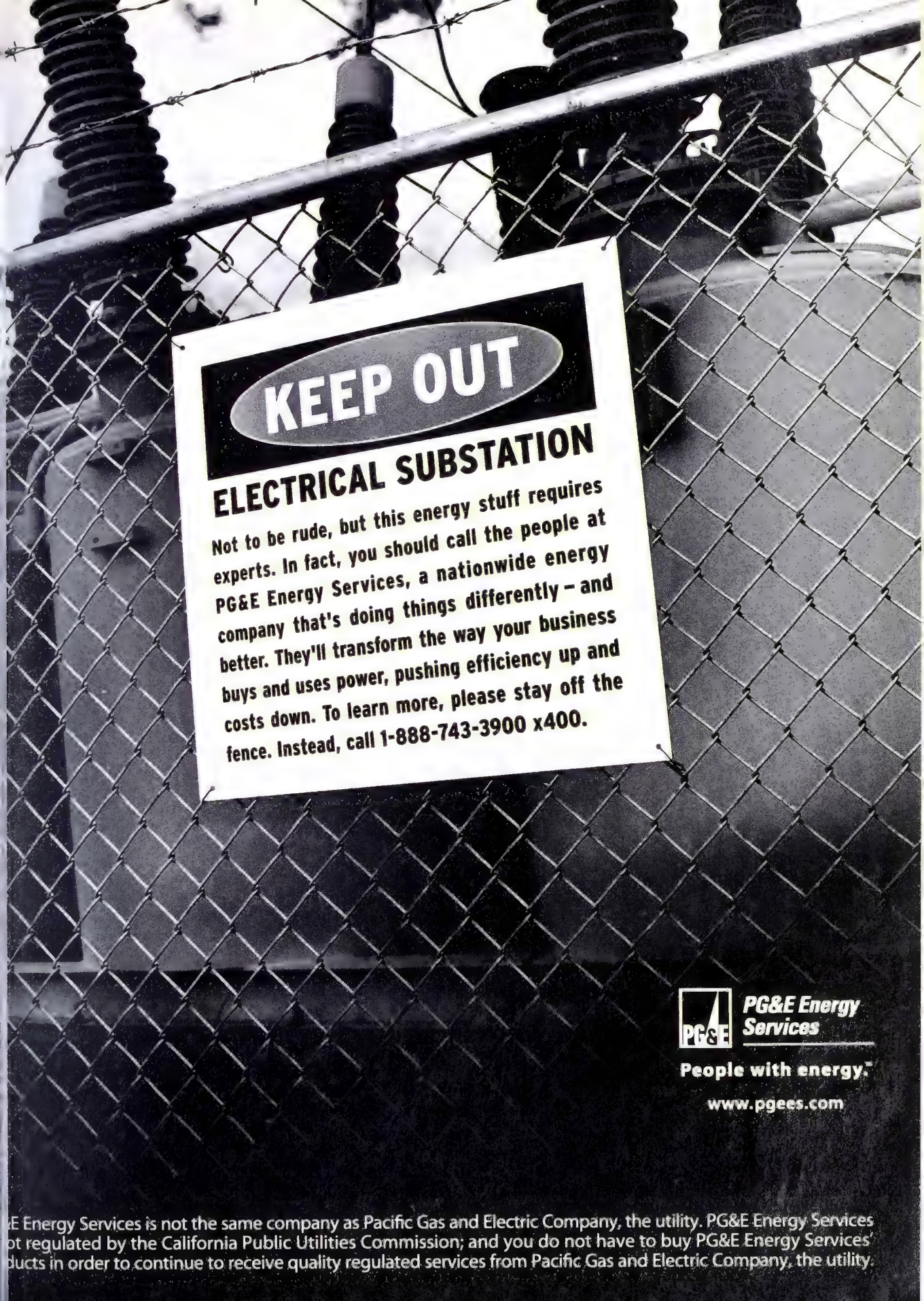
This realization lies behind the gradu ing of export controls by the U.S. g ment since the end of the cold war. Ov past decade, the U.S. has eliminated out controls on numerous dual-use products ly available on global markets, and it ha to make procedures for approving exp censes speedier and more transparent.

RESPONSIBLE ACTIONS. Consistent with goals, President Clinton completed effo tiated by President Bush to transfer aut for export-control decisions over comm satellites from the State Dept. to an agency group charged with weighing bo tional security and commercial concern new procedures reserve the right for the participating agencies, including the tagon and the State Dept., to appeal de it does not support. So far, these agencie not felt the need to exercise this right.

The compelling logic behind efforts b Republican and Democratic Administrati modify the nation's export-control proce should not be overlooked by Congress begins politically charged investigation exports of commercial satellites to There is simply no evidence indicating that campaign contributions have influen censing approval decisions under the procedures or that such approvals have promised national security.

In its discussions, Congress should n nore the fact that China is fast becom great military, political, and economic er—one that is capable of either promot impeding American interests. China ma be our ally, but it has behaved respo during the past year on such critical iss Hong Kong's peaceful transition, the o negotiations over North Korea, and the financial crisis. If we treat China like a my by eliminating its access to dual-use nologies important to its economic mo ization, we will increase the likelihood t will become an enemy—one equipped b allies with the very technologies we se withhold.

Laura D'Andrea Tyson is dean of the Haas School of Business at the University of California at Berkeley and was President Clinton's chief economic adviser.



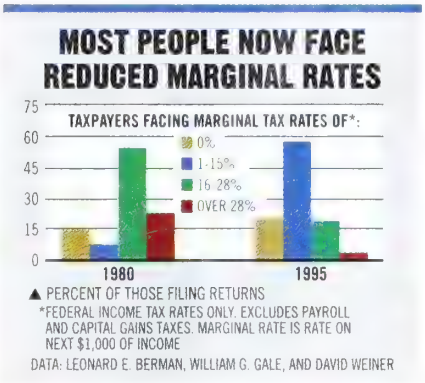
E Energy Services is not the same company as Pacific Gas and Electric Company, the utility. PG&E Energy Services ot regulated by the California Public Utilities Commission; and you do not have to buy PG&E Energy Services' ducts in order to continue to receive quality regulated services from Pacific Gas and Electric Company, the utility.

BY GENE KORETZ

TAXES: LOWER THAN YOU THINK

Federal rates are down sharply

How onerous is the federal income tax system as it applies to individuals? At first glance, the answer seems to be: very onerous indeed. Total personal tax payments as a share of household income have surged recently, for example. And despite seven revisions since 1980, the tax code is still replete with complexities and preferences that tend to encourage behavior that undermines economic efficiency.



This impression can be misleading, however. For one thing, the recent jump in receipts reflects growing prosperity—not high rates. Indeed, much of the increase has come from people cashing in gains on their stock holdings, even as the capital-gains tax rate has declined.

As for tax preferences, they have to be considered in light of declines in marginal rates. Such rates, which are the rates paid by taxpayers on incremental income, can have a potent effect on behavior. Other things being equal, the lower they are, the more likely people are to work, save, and invest—and the less likely they are to try to evade taxes through preferences or other strategies. Thus, low marginal rates are a key feature of an efficient tax system.

In a new study, economists Leonard E. Burman of the Urban Institute, William G. Gale of the Brookings Institution, and David Weiner of the Congressional Budget Office use survey and tax-filing data to estimate just how much the tax reforms since 1980 have lowered marginal rates actually paid by taxpayers. They find that two reforms have had the most impact: the 1981 Reagan cuts, which slashed all marginal rates and indexed brackets for inflation; and the 1986 act, which created two basic rates—of 15% and 28%. By contrast, the 1990 and 1993 revisions raised the marginal rate for just 1% of taxpayers.

For the vast majority of taxpayers, the study shows, declines in marginal rates have been dramatic (chart). Between 1980 and 1995, the share of taxpayers facing rates of more than 15% plummeted from 77% to 23%. And those facing rates of 28% or less rose from 77% to 96% of filers.

Meanwhile, the top income tax rate fell from 70% to 39.6%. And by 1995, that rate applied to fewer than 1% of taxpayers. (The main effect of the 1997 revision, which isn't covered by the study, was to cut taxes for those eligible for education and child-care credits, but to raise marginal rates for this group as the credits are phased out at higher income levels.)

These results need some qualification. The study focuses on marginal rates, not the total tax burden borne by households. Thus it doesn't count the impact of payroll taxes, which rose from a combined employer-employee rate of 12.26% to 15.3% during this period. Also, as the results show, the taxation of Social Security benefits that began in 1984 raised marginal income-tax rates by several percentage points for a minority of beneficiaries.

But even with these effects, says Brookings' Gale, "it's clear that most taxpayers today face far lower marginal rates than they did two decades ago."

STATES ANTE UP FOR WORKFARE

Service funds rise as cash aid falls

When reform of the federal welfare system was passed several years ago—putting a lid on federal grants but giving states more leeway on spending—some pessimists predicted it would touch off a "race to the bottom" by states eager to cut back aid to recipients. Instead, as a survey by the National Governors' Assn. indicates, spending is being reallocated to help lift citizens to self-sufficiency.

Between fiscal 1996 and 1998, reports the NGA, as welfare caseloads around the nation fell by 27%, state spending on support services per person rose sharply. While direct cash payments to recipients declined about as much as caseloads, outlays for work activities—from education and skills training to job placement and subsidized employ[ment] rose by a third. And state spend[ing] on child care grew by an impressive[amount].

In many cases, states are doing [more] than reallocating funds once us[ed for] cash assistance. Massachusetts, f[or] ample, has upped support for child[care] beyond the funds freed up by dec[lining] caseloads. In Minnesota, spendi[ng on] child care has nearly doubled since[1995] and families with incomes belo[w 85%] of the state median level are now[eligi]ble for child-care subsidies.

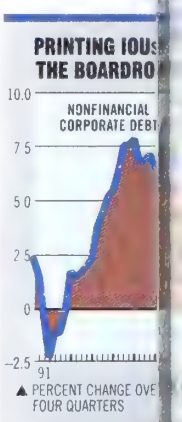
BUSINESS EYES A FINANCING GA[P]

As capital outlays rise, profits [fall]

Don't look now, but U.S. corp[orate] borrowing has been accelera[ting] sharply—even as the business en[vi]ronment grows more uncertain. As m[ea]sured by the Federal Reserve's flo[w of] funds data, nonfinancial corporate [debt], which had been growing at about [a] pace since mid-1995, has been hit[ting] a 10% annual clip since last fall.

According to Robert E. Mellm[an] Morgan Guaranty Trust Co., two d[e]opments account for business' incr[eased] appetite for debt. The first and [most] important is a growing gap betwe[en] internally generated funds and invest[ment] spending. Although the combinat[ion] rising labor costs and a lack of p[ricing] power has been eating into profi[ts] some time now, companies have [been] boosting capital spending and inve[sting] investment at a double-digit pace.

Second, business continues to [issue] more stock than it issues. As a res[ult] merger activity and stock-buyback p[ro]grams, the corporate sector has b[een a] net purchaser of stocks—to the tune of $110 billion at an annual rate in the first quarter—and the pace shows no sign of slackening.



With pressure on profits and cash flow growing and with factory operating rates falling, Mellman predicts business will act to limit the growth in its borrowing. And cutbacks in capital spending, he bel[ieves] are far and away the most likely ta[ctic] will adopt to achieve that goal.

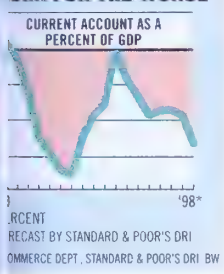
AMES C. COOPER & KATHLEEN MADIGAN

HE DOLLAR'S OMING U-TURN

:h the current-account deficit starting to balloon, it's bound to happen

U.S. ECONOMY When the pall from the Asian crisis eventually lifts, currency ers are going to take a hard look at the damage has done to the U.S. trade deficit. When they do, will very likely come to the same market-jarring lusion: "Sell the dollar!" The resulting flight to an- r currency—such as the new euro—could crimp s prices, lift interest rates, and push up inflation. won't happen overnight, mind you. Japan is now focal point of the foreign-exchange markets. Until n enacts real economic reform—or at least fixes its ie-of-cards banking system—Asia will not turn nd, and the U.S. dollar will continue to be the al currency of choice. And no amount of currency vention will change that, which is clear from the r's renewed gains against the yen in late June. or at least a while longer, the U.S. will continue to y the benefits of its muscular greenback, including od of foreign capital, falling import prices, and low tion and interest rates.

E CURRENT ACCOUNT: URN FOR THE WORSE



But the dollar's U-turn will happen. Why? Because the current-account deficit—a kind of cash-flow statement of U.S. international business that includes trade in goods and services, net investment income, and foreign transfers—is ballooning (chart). This deficit totaled a record $47.2 billion in the first quarter. At an annual rate, that was 2.3% of gross estic product, and the second-quarter gap is on k to hit 2.5%.

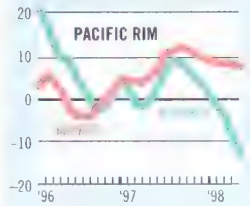
s a percentage of GDP, the current-account deficit is ady the largest of the Group of Eight industrialized ons, and it is headed toward 3%. That is typically level at which the currency markets begin to spec- e about a country's ability to continue to finance its rnational obligations at an existing exchange rate. simply, as a country's debts mount, its currency ts to look too lofty.

N DID THE U.S. get into such a hole? It has n digging for some time. The trade-deficit portion of current account, for example, has been widening ng this entire expansion. But the Asian financial cri- s speeding up the deterioration in the current account. First, the sharp falloff in exports to Asia is a big reason why the April trade data show that the trade gap is on its way to surpassing the chasm that opened up as a result of the superdollar in the mid-1980s.

Second, Asia is behind another growing concern for the 1998 current account: U.S. net investment income. This component of the current account is what U.S. investors earn in interest and dividends on overseas investments minus what the U.S. pays out to foreign investors. By mid-1997, this balance had swung decidedly into negative territory for the first time since World War II, and the drag is set to worsen.

That shift reflects the jump in U.S. payouts resulting from the huge inflow of foreign capital needed by the U.S. to finance its growing trade gap. The drain will continue well into 1999 because of the new money coming in as a result of the Asian crisis. Through the first quarter, net capital inflows to the U.S. totaled a record $264 billion during the past year. That includes $643 billion in foreign assets in the U.S. less $378 billion in U.S. assets abroad. The net capital inflow has slightly more than doubled in only the past two years.

SO FAR, THE ASIAN IMPACT IS ALL EXPORTS



▲ PERCENT CHANGE FROM A YEAR AGO, THREE-MONTH AVERAGES
DATA: COMMERCE DEPT., BUSINESS WEEK

That inflow has provided a major lift for U.S. stocks and bonds. In the first quarter, net foreign purchases of stocks jumped to a record $29.4 billion, triple the $9.8 billion bought in the fourth quarter. Also, demand for U.S. bonds surged to a record $47.3 billion, nearly double total fourth-quarter purchases of $26.9 billion. The resulting gain in stock prices and downward push on interest rates has buoyed demand in the U.S.

THAT STRONG DEMAND has already bloated the import side of the U.S. trade ledger. And now, significantly weaker exports to Asia are swelling the trade deficit even further (chart). The April gap for goods and services soared to a record $14.5 billion, reflecting a steep 2.6% drop in exports and a 0.9% dip in imports.

April marked the third month in a row that the deficit has widened sharply, and the trend is eye-popping. April's level is up from a monthly gap averaging $11.6 billion in the first quarter, and from $9.5 billion in the fourth quarter. So far this year, the trade deficit

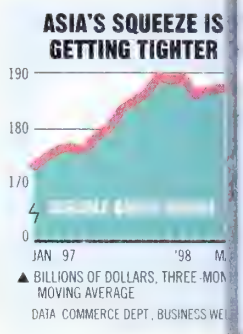
has totaled $49.3 billion, up from $37.1 billion in the first four months of last year. The overall downtrend in trade is mainly for goods, but services are also feeling the chill. The service surplus is shrinking, due to falling exports.

A widening gap with all Pacific Rim countries, including Japan and China, has more than accounted for the increase in the total deficit, and the deficit with Asia's newly industrializing countries alone has accounted for half. Trade with the NICs has gone from near balance to a deficit of $6.4 billion. What's more, the entire Asian impact on U.S. trade so far shows up only on the export side. That's why durable-goods orders have weakened this year (chart). In May, bookings dropped 2.6%, to the lowest level since July, 1997.

Any new wave of imports has yet to be felt. Asian goods continue to come in at a rapid clip, but the growth trend is no different now than it was before the crisis. That will change when Asian exporters start to find the financing they need to get back on their feet, adding to U.S. trade woes in the second half.

THE APRIL TRADE REPORT makes it clear that the Asian crisis is hitting the U.S. far harder than expected. The widening in the trade deficit subtracted three percentage points from first-quarter GDP growth. And if the deficit in May and June only stabilizes at the April level, a further swelling would take away an additional three points from second-quarter growth—a much l ger drag than nearly all economists had anticipa

The United Auto Workers' strike at General Motors Corp. will be another, but smaller, drag on the second quarter. By June 23, the three-week stoppage had idled 93% of GM's production and 142,000 workers. The strike is already lifting new claims for jobless benefits, and it will depress June reports on jobs, hours worked, and industrial production.



Moreover, if the strike lasts into August, as GI suggesting, July data will show an even larger and the strike will cause significant secondary imp in auto-related industries. With the dollar so strong, strike could give foreign carmakers an opportunity grab more market share in the U.S. That would be another factor pushing up the trade deficit.

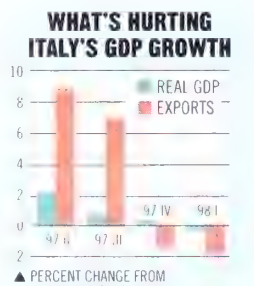
But at some point, the trade gap will grab the tention of the foreign-exchange markets. That's w happened in 1985, when the current-account de soared and the real trade-weighted dollar began plunge. And when the markets finally say enoug enough, all the benefits of a strong greenback will again start to fade away.

ITALY

ANOTHER VICTIM OF THE ASIAN FLU

The unexpected dip in Italy's real gross domestic product highlights how—just as in the U.S.—Europe is taking a bigger hit from Asia than anticipated.

Italy's real GDP slipped 0.1% in the first quarter vs. the fourth. A few special factors contributed to the decline: There was one less workday, and the government began to phase out its car-buying incentives in February. But the bigger and longer-term drag on growth was a sharp 1.6% drop in exports, which account for about one-quarter of Italy's economy (chart). And since imports rose only modestly, the foreign-trade surplus narrowed sharply for the second quarter in a row.



Moreover, the spring quarter began on a weak note as Italy's trade surplus with nations outside the European Union fell again. So far in 1998, exports to Japan are down 10%, while shipments to Asia's newly industrialized economies have plunged 24% compared with the first four months of 1997. The export drag has hit industrial production hard. Output fell 0.2% in April, and a preliminary government report says production for all of the second quarter will likely be down 0.6% from the first.

Anemic growth comes as inflation is falling, even though the lira weakened sharply from October, 1997, to April of this year. Consumer prices in Italy's major cities rose just 1.8% in June com pared with a year ago.

To be sure, other data point t some optimism. Industrial orders are rising, consumer sentiment surged in May, and the jobless rate, while at a high 12.2%, may have begun to fall. However, the GDP drop raises the odds for another interest-rate cut by the Bank of Italy, which has trimme rates three times in the past ye

The hope is that lower borrow ing costs will spur capital spending, which increased 1.3% in the first quarter. The downside is a possible reversal in the recent strengthening in the lira against the currencies of its major tradi partners. But the BOI seems will ing to take that inflationary risk in order to bolster economic prospects at home.

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AT LAST, TELECO

AT&T-TCI could deliver on the promise of melding telephones, TVs, and computers

We've all seen it before—two powerful executives, presiding over a hastily convened news conference to announce their new world-shaping combination. They stand, gripping and grinning for the cameras, zipping off sound bites for the evening news, and predicting that their megamerger will be the combination of resources, talents, and technology that finally brings the future into the present.

Indeed, as John Malone stood on stage with AT&T CEO C. Michael Armstrong on June 24 to announce their $48 billion deal, it was impossible not to recall how five years ago, he stood with Bell Atlantic CEO Ray Smith to announce a similar groundbreaking deal. That botched merger attempt led many to question the whole concept of "digital convergence"—the notion that telecommunications, television, and computers would all come together in a single, digitized system of electronic communications.

Well, a lot has changed since then. The technology to transport high-speed digital signals—for voice calls, video, or virtually any form of communication you can name—is vastly more powerful and less costly. The Internet and the Web have created a standard "platform" for managing all this digital traffic, and the Telecommunications Act of 1996 has reduced—but not eliminated—anachronistic barriers between communications markets.

Cover Story
THE AT&T-TCI DEAL

And in an ironic twist, AT&T, the company that has perhaps missed the most opportunities in the new world of digital communications, has come up with the deal that, if it works, will take advantage of all these trends—and could be the catalyst for other deals and business plans that break the bottleneck and finally deliver on the promise of digital convergence. "This is the deal that's going to get competition going," says former FCC Commissioner Reed Hundt. "This is exactly what regulators envisioned—consumers having cho

What will that choice be? starters, the new AT&T is now in pos to be the first nationwide commu tions company—since the breakup o old Bell system—that solves the mile" problem. Now, the only wa

AT&T will be positioned to bring competition and innova

NBOUND

ge that final gap to the user's home a a local phone company. Because of last mile bottleneck, there has been ually no competition in local residen- phone service, innovation is almost existent, and connections to the In- et have been painfully slow. Once TCI's cable network and set-top boxes are upgraded to handle a two-way flow—no easy feat, mind you (page 28)—AT&T can use the cable company's coaxial connections to transmit local and long-distance voice calls, Internet traffic and the usual cable fare.

ng-stagnant local residential phone service

The Parts of the Deal

THE VISION
For nearly a decade, techno-visionaries have been talking digital convergence of telecommunications, television, and computers. Why it's happening now. **Page 24**

WHAT MAKES IT POSSIBLE
From routers to cable modems to technology that increases the capacity of ordinary phone wires, the gear to create high-capacity "broadband" connections to the home is arriving. **Page 28**

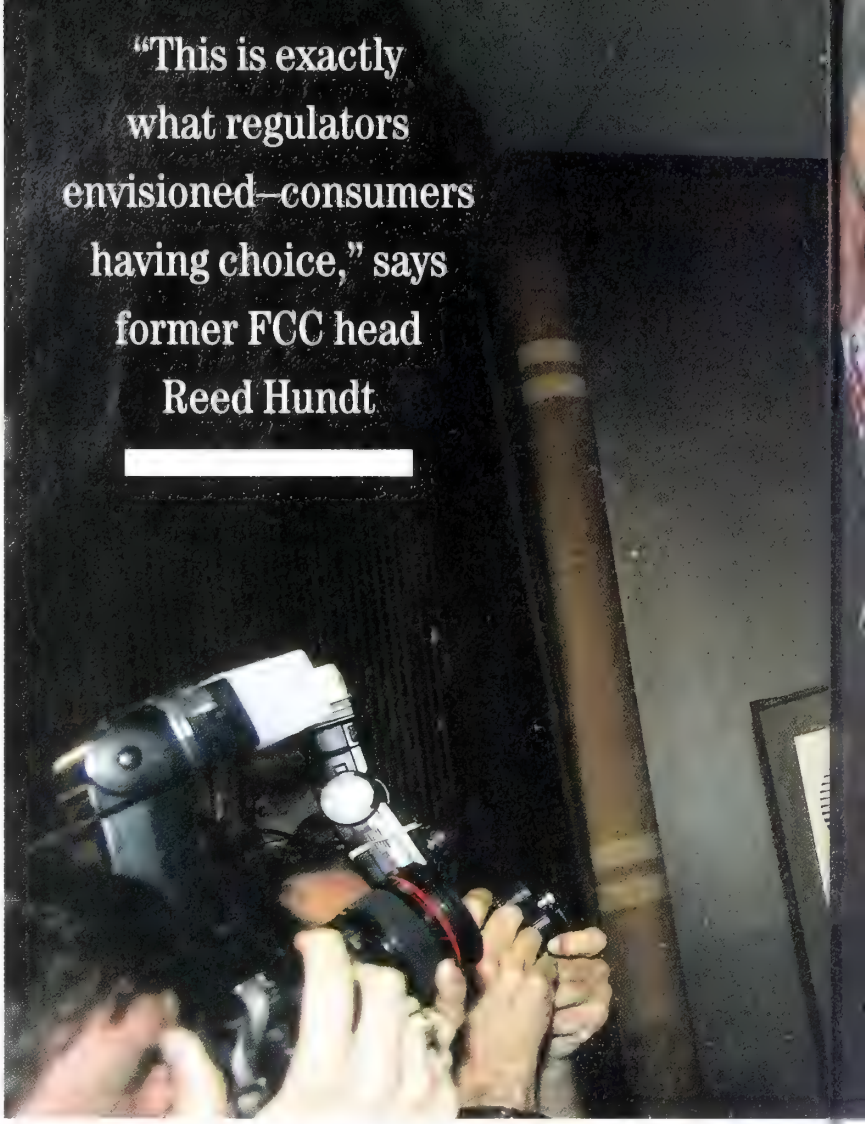
MEANWHILE, IN WASHINGTON
Can the Federal Communications Commission keep up with an industry that is evolving at fiber-optic speeds? **Page 29**

MORE CABLE-TELCO PAIRINGS?
Do cable companies have the resources to create their own two-way broadband nets, or will they be forced to deal? **Page 30**

THE HAPPIEST EXEC IN HIGH TECH
Bill Gates. He pumped $1 billion into Comcast to upgrade. This deal helps. He also got a win in court and a new high for Microsoft stock. **Page 31**

And then? Let your imagination run wild. Video voicemail will be a cinch. If a guest comes to stay for the weekend, you'll be able to order him a second phone line—and probably even give him the same number he has at home. Electronic commerce is likely to flourish as consumers can more easily cruise the Internet and as television melds with the Net. As TCI Chairman and CEO John Malone puts it, you'll be able to order Viagra online while you're watching your favorite show. "Just point and click," he says. "Do it on the fly."

What puts this vision within reach now is a host of new technologies that



are smoothing digital connections. Most important, the technology for providing telephone service over the cable network is now developed enough to offer an economically feasible—and potentially much better—alternative to the existing copper wire. While the costs of cable telephony have been prohibitive in the past, they've now dropped to the point where Armstrong expects to spend as much as $400 to $500 per home. Other cable companies have also shown that it works. MediaOne Group is offering cable telephony in Atlanta and Los Angeles—and says it has captured a 10% market share in the slices of those markets it has entered.

Cable isn't the only way to bridge the final mile, either. While TCI and its affiliates can reach 33 million homes in the U.S., AT&T plans to continue to experiment with wireless technology that it will deploy outside of the TCI region. That technology will be tested in several thousand homes next year and, if the tests are successful, it will be rolled out commercially in 2000. "We need to own our own facilities," says Armstrong. "We need to control our service, and we need to control our costs."

However AT&T—and rivals that follow—approach these new networks, it won't be cheap. The costs of upgrading TCI's entire infrastructure so that it can provide telephony and high-speed Internet access are enormous—about $15 billion for TCI and its affiliates, by Armstrong's reckoning. And some analysts think those numbers are low. They forecast that the costs could hit $20 billion or more.

Think of it this way: AT&T has bought the dirt road that leads to American homes. Now it must grade it and pave it to carry all the new traffic. "What's wrong about this deal is that TCI is not in the local phone business," says Mark R. Bruneau, president of Renaissance Worldwide Inc. "So it is a big gamble." On the other hand, AT&T is one of the few companies that can fund such an undertaking: It has $8 billion in annual cash flow and little debt.

Cost isn't the only issue, however. Although the technology for pushing voice traffic over cable works with small numbers of customers, some experts think it will be problematic if used widely. "That technology is just not at hand," says Michael Noll, a business professor at the University of Southern California.

Another risk to the deal? Under current telecom law, if AT&T pays to upgrade TCI's network for telephone service, AT&T will have to let competitors also use the infrastructure at a wholesale discount. That prospect convinced Sprint Corp. CEO William T. Esrey to walk away from a similar deal with a group of cable companies including TCI. "If we provided telephony service over cable, we recognized that they would have to make it available to competitors."

That may not be such a big issue for AT&T, however. By using the cable network to provide high-speed connections to the home that are 20 to 30 times faster than what the Baby Bells and GTE now provide, AT&T expects to produce a massive pipeline that can carry all sorts of traffic at relatively low cost. "We could have a universal pipe in the home that handles all flavors of what will then be digital, including video, voice, and data," says Van Baker, director of consumer research at market researcher Dataquest.

That opens up a potential bonanza of services beyond telephony. Web sites will be able to incorporate video. You'll be able to jump from a commercial to the advertiser's Web address. And video telephony will become much simpler and more affordable. "Your grandkids are ing to laugh at us for using these l black things to talk on without lookin each other."

That poses the most profound c lenge the local phone companies h ever encountered. So far, the Baby B have rolled out broadband services consumers slowly—if at all. Few v to market a low cost alternative could cannibalize their high-margin s to businesses. But with AT&T plan to roll out high-speed services, the B will have to get serious about provi high-speed access of their own or fa revolt from customers. "If the AT&T deal goes through, that will create r competition, which in turn will accele the buildout of high-bandwidth con tions to the home," says Lawrence Ellison, CEO of Oracle Corp.

AT&T isn't the only company using technologies to muscle in on the phone companies' markets. Earlier summer, Sprint announced plans f number of "integrated services," inclu local service, over high-speed connect And cable companies trying to sell

Cover Story
THE AT&T-TCI DEAL

ARMSTRONG AND MALONE AS THEY ANNOUNCED THEIR DEAL

BUILDING A BETTER BUNDLE

AT&T

AT&T PROVIDES

- 70 million long-distance customers
- 4 million wireless customers
- 1.1 million dial-up Internet access customers
- 15 million business customers
- Local access networks in 250 cities through Teleport
- Strong brand awareness
- 128,000 employees
- 1997 revenues $51.32 billion

TCI

TCI PROVIDES

- 10.5 million cable subscribers out of 33 million homes passed
- 10 million subscribers through affiliates out of 16 million homes passed
- @Home Network, an Internet access and content provider
- Access cable and sports networks through Liberty Media Group
- 31,500 employees
- 1997 revenues $7.57 billion

AND MAKING IT WORK

How the combined company will be structured

AT&T CONSUMER SERVICES

(separate tracking stock)

- All-consumer long-distance, wireless, cable, and Internet businesses
- 1999 projected revenues—$33 billion

AT&T BUSINESS SERVICES AND WHOLESALE NETWORKING

(wholly owned)

- All telecom and outsourcing services provided to business, including Teleport, and network access sold to other phone companies
- 1999 projected revenues—$29 billion

LIBERTY MEDIA

(separate tracking stock)

- Stakes in several cable networks including Discovery Channel and Black Entertainment Television

ervices think AT&T's entry into cable ıony will help them. "By virtue of battling, that helps any cable oper- even those that aren't affiliated with " says Dallas Clement, treasurer ox Communications.

cal phone companies will have to ıble to find ways to provide similar es to their customers. So far, U S is the only Bell that has announced ssive plans to roll out high-speed onnections.

e Bells certainly have the opportu- o provide high-speed connections—he additional services that they possible. The Bells have started ploy digital subscriber lines (DSL), ı provide speeds as fast as 1.5 bits per second over copper wire. ugh there are now several different 's of DSL, which has contributed to a in wholesale rollout, many experts the phone companies are further than the cable companies.

ne to market, rather than technolo- likely to separate the winners from osers. The first to offer high-speed ctions is likely to be able to skim off the cream of consumers, who most value use of the Internet. Since there are economies of scale to be had from rolling out high-speed connections, the company that gets a headstart will have a significant advantage. Asks Christopher Mines, telecom analyst with Forrester Research, "Can AT&T-TCI be the first one there? They take a giant step with this deal."

It's a step that some observers say AT&T almost had to take. "Frankly, it allows AT&T to diversify out of the consumer long-distance business before it completely collapses," says Craig Moffett, vice-president and telecom specialist at Boston Consulting Group. In fact, as part of the June 24 announcement, AT&T disclosed its plan to separate the consumer business into a new unit with TCI's cable service called AT&T Consumer Services. The $33 billion group, with AT&T President John D. Zeglis as its CEO and TCI's Leo J. Hindery as president, will have its own stock. It's mission will be to sell all sorts of consumer services—cable, wireless, local and long-distance, and Internet services. What remains of AT&T will be the long-distance network and the corporate business.

Armstrong describes the new consumer company as the high-growth—and high-risk—portion of the AT&T portfolio. Indeed, there are plenty of doubters who wonder why AT&T, which has failed so often in its attempts to conquer cyberspace, will now prevail. Such concerns helped knock AT&T's stock down 8%, to $60, on the day of the announcement.

Still, AT&T's deal with TCI likely marks a turning point in the evolution of communications. It's the beginning of the breakdown of the Baby Bells' monopoly over the last mile. "This looks like the break in the dam," says Kevin Costello, a partner in global communications and entertainment at Arthur Andersen. A flood of new communications services is on the way.

By Peter Elstrom with Catherine Arnst in New York, Roger Crockett in Chicago, and bureau reports

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THE NEW TECHNOLOGY: WHAT YOU NEED TO KNOW

The merger introduces more changes to the landscape

The merger of AT&T and Tele-Communications Inc. might look at first like that old Information Superhighway reborn. But forget the grandiose visions of expensive, built-from-scratch, interactive-TV systems—the stuff of convergence dreams in the early 1990s. In the four years since Bell Atlantic Corp. and TCI called off their proposed marriage, the Internet phenomenon has roared to life, and the technology behind convergence has changed—utterly. Here's a look at the new terrain and how the AT&T merger with TCI will alter it further.

THE INTERNET EFFECT. The Internet has leveled the playing field. Every communication company—whether a local or long-distance carrier, an Internet service provider, or a data-networking shop—uses a common language to send electronic packets of data back and forth. And that language, known as Internet protocol, can carry voice or video traffic, as well as E-mail and Web pages. What's more, the language works equally well over copper phone wires, satellite microwaves, and coaxial TV cables.

For AT&T, that makes TCI's huge cable system look less like an alien being—and more like a very fat pipe for carrying all sorts of communications services in and out of American homes. "This merger positions AT&T to be the keeper of that pipe," says Van Baker, director of consumer research for market researcher Dataquest Inc. "It may come faster than we thought."

LOCAL TELCOS LOSE OUT. AT&T's bet on cable could hurt rival schemes for high-speed local Internet access. One technology that was pushed by local phone companies, known as integrated services digital network (ISDN), already looks fairly comatose. So phone companies are throwing their weight behind a faster, cheaper service called digital subscriber line, which runs over existing phone lines. But DSL, which moves data at up to 1.5 million bits per second, is slower than cable, which zips stuff along at up to 30 mbps. Moreover, as many as 50% of U.S. phone customers live too far away from their local phone offices to get DSL.

Cover Story
THE AT&T-TCI DEAL

THE FINAL MILE. AT&T's rationale for buying TCI is to gain quick access to what is called the "final mile"—the line into the home. Previously, AT&T tried to make this connection by leasing access from local phone companies. But that left it with slim margins and little control of the custo

Building its own local phone l though, would have been economi unfeasible for AT&T. It's still pursuir experimental wireless approach, that, too, is still prohibitively ex sive. That leaves cable, which wa costly back when specialized swit were required to adapt the syste phone calls. Now, however, cable panies can install off-the-shelf data working gear and turn their coaxi bles into universal Internet pipes. a box in the home to convert p calls into data packets, and sud the cable becomes a voice networ

CABLE IS NOT PERFECT. But systems built to c signals in on rection. Two traffic take upgrade that costs up to $300 a h hold. TCI still has about $2 billio go in its system upgrade. "There' mense work that has to be on the facilities themselves to r them telephony-compatible," William T. Esrey, chief executive o of Sprint Corp., w tried but then a doned a deal with ble companies.

WHAT ABOUT SA LITES? With a ro dish, consumers ca TV and data feeds the sky. The dow speeds can knock socks off—up to mbps. But to talk h consumers need a r lar modem that nects to the Inte over phone lines. fordable, two-way h satellite communica are still years a One promising tender is the Teledesic network pla for 2003. Cooked up by billion Craig O. McCaw and William H. G III—recently joined by Motorol will rely on hundreds of satellite low earth orbit. That will let consu use relatively cheap devices to and receive data.

Cable has the advantage: here today and passes 90% of homes. AT&T won't get all of th of course. But working with TCI, it a chance to lift cable above its pa status and make it a star of the ternet Age.

By Andy Reinhardt in San M Calif., with Neil Gross in New York Steven V. Brull in Los Angeles

AT&T could be the "keeper of the pipe," able to carry voice, video, E-mail, and Web pages

NOW, CABLE IS A CREDIBLE ROUTE FOR ALL INTERNET TRAFFIC

COMMENTARY

By Catherine Yang

'THIS COULD BE THE BREAKTHROUGH MERGER'

Just a year ago, then-Federal Communications Commission Chairman eed E. Hundt declared that '&T's rumored plan to buy a aby Bell—SBC Communica-ons Inc.—was "unthinkable." fter all, Hundt railed, the 996 Telecommunications Act as supposed to encourage ng-distance carriers to *com-ete* with the Bells—not *erge* with them. The deal ever jelled.

Now, the FCC's reaction to '&T's proposed hookup with ible giant Tele-Communica-ons Inc. is a lot friendlier—e might say almost jubilant. 'his could be the break-rough merger," says Hundt's ccessor, William E. Kennard. e calls the deal "eminently inkable." Hundt, now a tele-m consultant at Charles Ross artners, was ecstatic: "Thank od Almighty, there could be mpetition at last."

After all the false starts of lecom deregulation and years unsuccessfully pounding the aby Bells to share their lines ith new rivals, AT&T and TCI ave come up with the first eal that carries out the law's tent of bringing competition local phone markets. For ennard and his team—who ave come under criticism as e wait for competition ap-eared to be endless—it was a oment to breathe a sigh of re-ef. They should savor it: From now n, they're going to be busy.

Why? The moment the AT&T-TCI eal was announced, the Bells leaped ito action. Let's be frank: There is no eal less attractive from the Bells' erspective than AT&T-TCI. After all, T&T had almost given up trying to enetrate the local market because of e Bells' vigilant guard-dogging.

OLD BELLS. Now, the regional phone roviders hope to use this merger and s promise of bringing competition to e local market to knock down barri-rs to the Bells' entry into long dis-ance. The biggest of course: the Tele-om Act, which requires the local arket to be opened up before the ells can enter long distance.

Even Kennard's FCC is rejoicing at the prospect of true competition at last

Given this deal, the Bells now expect to get theirs. "I don't see how they can continue to approve deals with long-distance guys and still keep us out of the long-distance market," says Robert T. Blau, BellSouth Corp.'s vice-president for regulatory affairs. BellSouth won't oppose the deal but does plan filings with the FCC and Justice asking that the deal not be approved until all barriers to long distance are removed for the Bells.

First in line, no doubt, will be Bell Atlantic, which is waiting for approval from New York State regulators to offer long-distance in that lucrative market. If it gets the O.K., as expected, other Bells will follow in a new round of petitions to state regulators.

The boldest Bell—SBC—is likely to feel emboldened, too. The Texas-based Baby Bell has fought the hardest against the 1996 rules on its ravenous acquisition binge. Currently, SBC has pending deals to buy Ameritech Corp. and Southern New England Telephone Co. Neither consolidation is exactly what lawmakers envisioned when they cobbled the telecom act together, but both may be hard to stop now that the telecom landscape seems to be changing so dramatically. "This verifies our vision of the future: Global telecom companies will compete for customers by offering local, long-distance, cellular, cable-TV, data, Internet, security, and related communications services," says Barry K. Allen, Ameritech's executive vice-president for regulatory and wholesale operations.

Do the Bells have a strong case? Well, they certainly have a point about AT&T-TCI. If it works, it will be a new model for local competition—a vertically integrated giant offering one-stop shopping for everything from local and long-distance service to cable and Net access.

But Kennard is not entirely convinced. He wants to make sure AT&T will prove its cable connection works first. So, for now, the FCC is likely to hold to the terms of the 1996 bill—and continue to demand proof of competition before allowing them into long distance. There's still good reason for that: Despite the latest deal, local phone companies remain virtual monopolies. But the FCC should also recognize that the technology that makes possible the AT&T-TCI deal they applaud also changes the conditions for other players. And sooner or later, that means that local phone companies will be entering the digital free-for-all. Regulators should be there to make sure they do so in procompetitive ways.

Yang covers telecommunications from Washington.

Cover Story

THE AT&T-TCI DEAL

EVERY CABLE COMPANY IS A CINDERELLA NOW

The race is on to find a partner before the glow fades

It got the biggest laugh at the June 24 briefing for analysts about AT&T's pending deal to buy Tele-Communications Inc. TCI Chairman John C. Malone, recalling his stint as a bean counter 32 years ago at AT&T, remembered the advice he gave to the phone giant's board: "Leverage up, you're spending too much on g—damn taxes."

Certainly Malone has taken his own counsel, becoming the leader of the pack of cash-hungry, debt-addicted entrepreneurs who built the cable industry. Now, he's found a big brother to take his company and its affiliates the rest of the way. "I would imagine, with AT&T's help, we're going to be looking to get bigger," says Marc B. Nathanson, chief executive of Falcon Cable TV, a 1 million-subscriber system which is 47% owned by TCI.

FEELERS. Get bigger or get bought out. With a new vision of Internet-based "convergence" sweeping the communications business, cable companies are suddenly back in the high-tech game. Those with lots of resources may get to play alone—by building themselves into "broadband" pipelines. Others will become somebody else's pipe.

Even before the AT&T deal was announced, cable executives were getting feelers from the likes of Sprint, GTE, British Telecommunications, and even Deutsche Telekom. "We've talked with all kinds of people who want to be our partners," says Richard Post, chief financial officer of cable operator MediaOne. "We've got no shortage of interested parties."

And the market figures the AT&T-TCI deal will push up valuations. TCI's stock was up 2.7%, to 39¾, on June 24, and No. 1 Time Warner rose 6.2%, to 88⅝. Appearing at the National Press Club on the 24th, Jane Fonda was asked how her husband, cable mogul and Time Warner Vice-Chairman Ted Turner, viewed the AT&T-TCI combo. "Ted was happy this morning," she said. "That's all I know."

Whatever deals follow, one thing is clear: The cable industry will continue to suck up cash. Many cable companies have already done lots of rewiring, even some of them are nowhere having a system that can support service. John R. Alchin, senior vice president of Comcast Corp., figures it cost his company up to $50 a custo to do so, on top of the $225 per ho now costs Comcast to upgrade for tal services. Little wonder that A hints his company—which already $1 billion infusion from Micro Corp.— would love some of AT&T's ey as well. "There are strategic an erating reasons for doing business AT&T," he says.

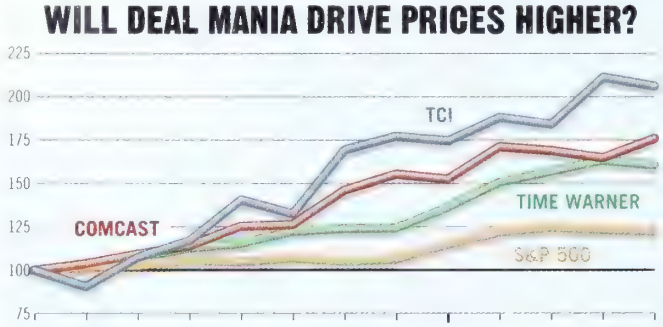
AT TIME WARNER SHARES ROSE 6.2% THE DAY THE DEA

Some companies are overtly averse. Cox Communications, for has launched local phone service in markets, signing up 17% of ho where its services are offered. Tres er Dallas Clement says that Cox u be interested in reselling local serv AT&T, but he says Cox has no need full telecom partner.

Moreover, cable and telco par ships have been attempted before out much success. Malone himsel been there, in his short-lived 199 with Bell Atlantic Corp. "But this will close," Malone s es. He's probably Some 98% of Ame homes now have TVs, pared with 94% of ho with telephones, acco to TCI President L Hindery Jr. Cable co nies have at last fou company that needs in American homes more than they do.

By Ronald Grov Los Angeles and Ri Siklos, with Neil Gro New York

WILL DEAL MANIA DRIVE PRICES HIGHER?



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DATA: BLOOMBERG FINANCIAL MARKETS

COMMENTARY

By Robert D. Hof

HOW SWEET IT IS (AGAIN) FOR CHAIRMAN BILL

AT&T's C. Michael Armstrong and Tele-Communications Inc.'s John Malone were in the spotght, but the high-tech exec having ıe best time on June 24 was—withıt a doubt—William H. Gates III. he AT&T-TCI deal, which promises) give Microsoft Corp. a new high-peed "platform" on which to ell products and services, was ing on the cake for Gates in a eek that brought him a stuning victory in a Washington ppeals court, the launch of Vindows 98, and a new record or Microsoft's stock and his ast fortune.

For months, Gates has been nder assault as America's high-ech bully. Now, he's racing own the Infobahn—once again ı the driver's seat. The re-ound began on June 23, when he U.S. Court of Appeals truck down an injunction ban-ing Microsoft from forcing PC nakers to carry its Internet Explorer browser as a condition f licensing Windows 95. The ourt ruled that U.S. District Court Judge Thomas Penfield ackson erred when he issued he injunction last December, harging that Microsoft was try-ng to put rival browser maker Netscape Communications Corp. out of business. Not surprisingly, Mirosoft is jubilant. Says Chief Operting Officer Robert Herbold: "This s a great day for consumers and a great day for anyone who cares bout the high-tech industry."

Well, for Microsoft, at least. The uling is widely interpreted as a huge setback to a key claim in the ederal antitrust suit filed in May. One of the suit's central allegations is hat by bundling a browser with Windows 95, Microsoft illegally stunts competition. The 2-to-1 decision essentially backs Microsoft's assertion that it can add anything it wants to Windows as long as consumers get some benefit from it. Says Hillard M. Sterling, a Chicago antitrust attorney: "The ruling shakes the pillars of the government's larger case."

Trustbusters, however, don't agree. Justice Dept. officials point out the feds' case is much broader—that it includes charges of using exclusionary contracts with Internet service providers and pacts with computer makers that bar them from making changes to the opening PC screen.

How does the AT&T-TCI deal help Gates? A year ago, Microsoft invested $1 billion in Comcast Corp.—

A win over Justice, a smart cable bet, Win98 debuts, and now he's worth almost $57 billion

whose stock has nearly doubled since then—to goad the cable industry into faster deployment of high-speed, two-way networks for delivering new services such as video and Net programming. He also bought WebTV to deliver the Web over cable TV. A week ago, Gates upped that ante, joining with Compaq Computer Corp. to invest $425 million for a 20% stake in the Road Runner cable access venture.

The common goal: to expand the market for everything Microsoft makes. That means Windows software and programs for PCs and cable-TV set-top boxes; backroom "server" software to deliver video and Internet content; not to mention a plethora of E-commerce and Net service offerings, from car buying to travel sales.

Bill's fairy-tale week wasn't over yet. On June 25, Microsoft was set to launch Windows 98. Until the court ruling, Win98 hadn't caused much of a stir in the market. But, says Webb McKinney, general manager of Hewlett-Packard Co.'s Home Products Div.: "The government turned what was a modest enhancement into a major event."

MORE AMMO. Make no mistake: Gates won't soon pop the Dom Perignon. Justice insists it has lots of legal ammo left. With the June 23 ruling, Gates has a way to approach Justice to settle the remaining charges, analysts figure. "That would be a brilliant move and show a little modesty," says Deutsche Bank Securities' Michael K. Kwatinetz. "And DOJ could walk away without being totally embarrassed."

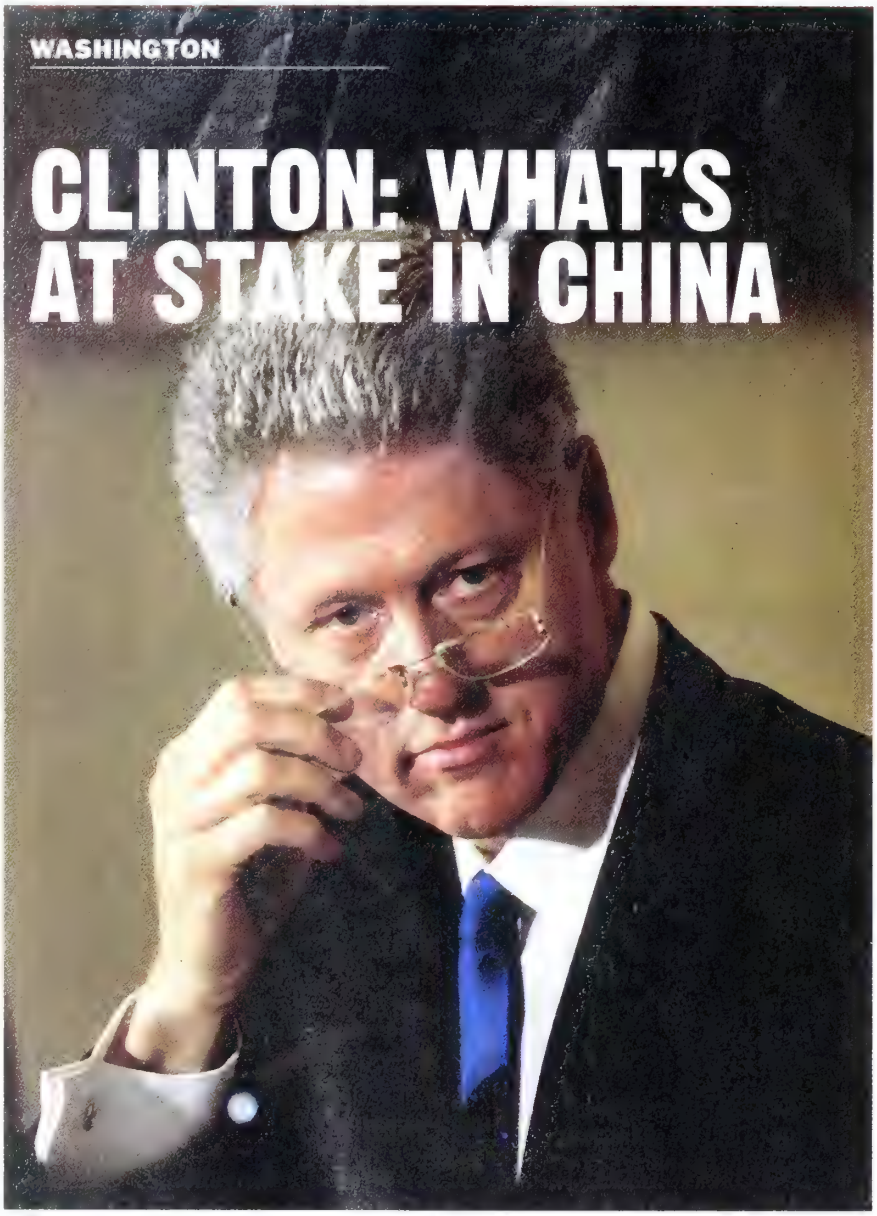
And while the prospect of a new superhighway from the AT&T-TCI deal gives Gates something to celebrate, it also poses tactical problems for Microsoft. AT&T is a longtime ally of Microsoft rival Sun Microsystems Inc., which has a contract with TCI to supply software for new digital set-top boxes. Oracle CEO Lawrence J. Ellison thinks few cable companies will use technology from Microsoft—which has a similar set-top-box agreement with TCI—for fear of giving up their control: "They're scared to death of Microsoft."

Still, Gates can rest a little easier. He's got a wee bit more personal spending money. His week of glory pumped Microsoft's stock up to an all-time high of 104⅝, making this Infobahn racer's stake worth almost $57 billion.

Hof covers the computer industry for BUSINESS WEEK.

WASHINGTON

CLINTON: WHAT'S AT STAKE IN CHINA



On June 19, President Clinton sat down with BUSINESS WEEK *White House Correspondent Richard S. Dunham and members of other news organizations to discuss his trip to China and geopolitical and economic issues elsewhere. Here are highlights:*

Q: *How have the East Asian economic crisis, the nuclear standoff in South Asia, and congressional hearings about alleged Chinese involvement in American elections and technology transfers affected the summit's agenda?*

A: The first two matters have made the importance of the trip even greater.... The Chinese have tried to be constructive in working with us on the whole Asian economic crisis. And if you look at the Indian subcontinent... you can't imagine any scenario in which we can unravel the difficulties between India and Pakistan without China.

Now, as to the congressional investigations, the only one that I think has any bearing... on our relationship with China is the inquiries into whether any elements of the Chinese government attempted to influence the last election by channeling money into my campaign or the campaigns of various members of Congress.

As I have always said, that is a s ous issue. I have raised it with the nese, from the President on down. T have vigorously denied it. And I h asked them to cooperate in every with the investigation that we hav conduct into this—that is, "we" the ecutive branch, and "we"... the C gress. But that doesn't in any way dermine the trip's importance or n for a partnership against the ba ground of the economic and security sues you mentioned.

Q: *China has been hinting that it m not be able to hold the line on curre devaluation. How worried are you a that?*

A: First of all, I think it's clear everyone that they don't want to value and they've been taking extra dinary actions to avoid devaluation. I think in so doing they have helpe contain and to stabilize the situatio Asia. And they deserve credit for t And I personally appreciate it....

The best thing we can do is to w with them, with Japan, and with oth to try to change the conditions so t the pressure to devalue will decre rather than increa

STEADYING INFLUENCE

China has "helped to contain and to stabilize the situation in Asia. They deserve credit for that"

Q: *Your Administ tion has aggressi ly pushed Americ companies and pr ucts in the glo marketplace. Is th a danger that emphasis on co mercialism co cloud national se rity or human-rig interests?*

A: I think they two different issu It only undermines human rights if y basically just do it with a wink an nod and... you don't care about hum rights or other issues of liberty or man decency. This is not just with C na, but generally. On balance, the e dence is that economic prosperity a economic openness lead to greater fr dom and a higher quality of life acr the board.

Now on the national security issu very often these questions require ca ful judgment by people who know the facts.... And I think the syst has worked well for the United Stat and has advanced our interests wi

"The U.S. needs to be seen doing everything possible to

undermining our security. I've not any evidence of a national security 'est that has been compromised.

)ften, there are delegations of chief utives accompanying trips of this , but it doesn't appear that there be this time. Is there a reason for ?

Ve are going to have a U.S.-China ıess meeting in Shanghai, and a lot American CEOs are going to be e.... But, frankly, since this is the trip an American President has e in quite a while, and since there issues other than economic issues have to be front and center, I ght it was better this time just to our delegation.

Asia and Russia face economic s, but a proposal to pump $18 bil- into the International Monetary d is languishing on the Hill. So- conservatives want to add anti- tion language, and House Speaker t Gingrich has threatened to hold it How important is it to pass an IMF quickly?

The economic trouble in Asia has e it more important in two ways— symbolic and one practical. Sym- ally, it's more important because United States needs to be seen do- everything possible to be a respon- player in the international economy because we have a huge stake in t happens in Asia. A big percentage ur exports go to Asia; a significant entage of our own economic growth been fueled by that export market. here is also a practical reason. So y countries got in trouble at the e time that the IMF is going to need money pretty soon. We can't expect ead the world when all these huge ests are at stake and then say: "I'm y, there are 15 or 20 members of Republican majority in the House have said that if this Administra- won't change its family planning cy, then they're prepared to see us our vote in the United Nations [for ng to pay dues] and have no influ- over the International Monetary d."

his is part of a dangerous move to- d both unilateralism and isolationism you can also see in some of the get proposals for foreign assistance. ıe members of the House appear to it to sanction everybody in the ld who doesn't agree with us, and invest in anybody who does agree ı us.

onsible player ”

COMMENTARY

By Richard S. Dunham

THE GOP IS CHOOSING SYMBOLS OVER SUBSTANCE

Congressional Republicans like to lecture welfare mothers, bureaucrats, and Chinese Communists about irresponsible behavior. But they aren't setting a very good example these days.

Midway through the year, lawmakers still haven't agreed on a 1999 budget blueprint, due by law two months ago. The Senate has deep-sixed campaign-finance reform and a comprehensive tobacco bill. The House is trying to hold an $18 billion International Monetary Fund assistance package and U.N. dues hostage to the demands of antiabortion forces.

TAX DEBATE: *Bill Tauzin and Armey*

Amid the wreckage, Republicans point to one proud accomplishment: On June 18, the House voted to abolish the tax code. It's a safe vote because the Senate and Clinton will never go along. It's also meaningless, since the legislation would wipe out the code in 2002 only if Congress and the President have adopted an alternative. Well, if the two branches could agree on a new system, the old tax code would be history anyway.

What's going on here? Led by House firebrands, Hill Republicans are again playing to their conservative core, from tax-hating supply-siders to Religious Right activists, to ensure a strong turnout in fall elections. The result: a spate of partisan votes meant to embarrass Democrats. Among them: a ban on so-called partial-birth abortion, restoration of organized prayer in public schools, and tax breaks for private- and religious-school students.

Conservative activists, who earlier this year threatened to sit out the election, are thrilled. "It's a signal to the shock troops that the Republican Party has a tremendous record to run on," says GOP strategist Keith Appell. And GOP pollsters are telling their elected officials that the selected issues are a hit with most voters. Crows House Majority Leader Richard K. Armey (R-Tex.), "I have no doubt that we are applauded in America."

But these tactics are alarming some GOP centrists. Veteran moderates such as Representative Marge Roukema (R-N.J.) worry that the GOP has been hijacked by the far right again. "It's symbolic show business," she complains. "As the majority party, it is our moral responsibility to find ways to deal with real issues. How can we remain a majority party if we don't seek consensus?"

Roukema has put her finger on the potentially fatal flaw in the Republican strategy. Symbolic votes may make good 30-second attack ads, but they won't improve schools or fix managed care or ease global economic crises.

BRINKMANSHIP. Still, Republican strategists insist that the symbolic votes reflect a commitment to principle. But if the party truly wanted to enact antiabortion legislation, for instance, it would call Clinton's bluff and compromise on a late-term ban that would allow the procedure if a mother's health were threatened. But the GOP prefers a campaign issue to a policy win.

That kind of partisan brinkmanship is a throwback to the GOP's 40 years in the House minority. As the majority party, the GOP is expected to legislate, not posture. If Republicans keep acting like they're still in the minority, come November voters may decide that's just where they belong.

Dunham is BUSINESS WEEK'S White House Correspondent.

A closed network is an oxymoron.

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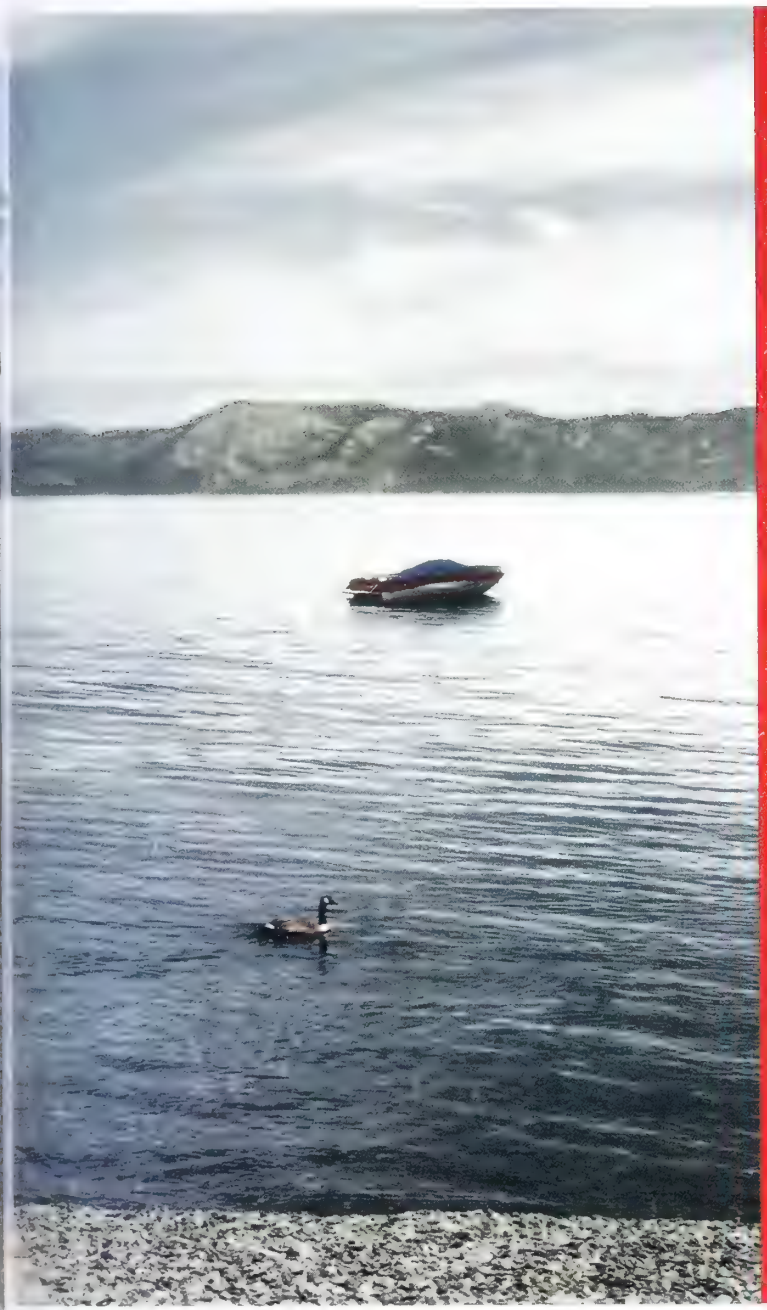

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PHARMACEUTICALS

AN EPISODE OF VIAGRA INTERRUPTUS

With fewer insurers covering the cost, sales are slowing

It was bound to happen. Sales of Viagra, the massively publicized little blue pill that corrects erectile dysfunction, reached an early peak and have started falling.

True, it's still a blockbuster drug. Physicians wrote out more than 2 million prescriptions in Viagra's first 10 weeks on the market, and first-year sales could still top $1 billion for Pfizer Inc., its inventor, say market trackers at IMS Health Inc. But that's below what some analysts predicted. "The pent-up demand is drying up, and we're already seeing a drop-off in new prescriptions," says Arvind H. Desai, a partner at researcher OrbiMed Advisors in New York. "Obviously, a good bit of this was experimentation." Desai has trimmed his estimate of annual sales to $700 million, down $150 million from his earlier prediction.

Maybe it's just a sign that summer's here and people are spending more time outside. More likely, the drop was caused by a number of factors—including reports of the deaths of a half-dozen Viagra users as well as such side effects as headaches and blue-tinged vision. And then there's cost.

RATIONING. In recent weeks, health-care companies told subscribers they won't pick up the $10-a-pill tab. On June 19 and June 22, giants Kaiser Permanente and Aetna U.S. Healthcare said they won't cover Viagra. A Pfizer spokesman says "it was expected that some would not cover it and others would."

Other companies have said they'll for Viagra but will ration the pil usually, one or two pills a week. l Cross & Blue Shield of Illinois, for ample, used to let physicians de now it limits patients to a si month regimen. Now, insurers er 41% of Viagra prescripti down from around 50% when drug was first introduced.

The upshot: By June 12, number of weekly prescript had dropped to 233,391, 23% er than in the week ending 8, the drug's peak. New pres tions were down 40% over same period, according to Health. Pfizer says that strong tial demand and a blitz of publi clearly affected early sales, and it's to forecast long-term usage.

"COMMON SENSE." The new limits on Viagra by insurers and manag care companies may slow the pill's ceptance even further. The decisions Kaiser and Aetna on Viagra cover came in mid-June and won't show in the data for weeks. Viagra's rep tion as a lifestyle drug—an enhance sexual function rather than a res er—didn't help its cause with the surers. "Our sense was that Viagra pushing the limits of common sens what should be covered by a me policy and therefore paid by everybo says Dr. Francis J. Crosson, execu director of the Permanente Federat Kaiser figured it would cost more t $100 million a year to cover fewer t 1% of its members.

Still, Viagra has already set rec without too much help. "Insurance not play a big part in the purchase cision," says IMS Vice-President G Friend. "This is not like the treatm for other chronic conditions, where have to take it every day and there's instant gratification."

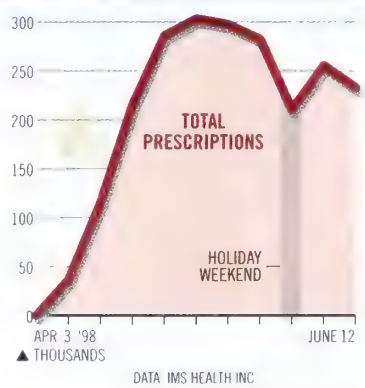
Indeed, the slow sales may be jus hiccup. There's question that sales increase as the d is approved in Eur and elsewhere. E ployers may und write supplemen coverage for comp tive reasons. And sumers may dec that even at $1 dose, Viagra is m fun and costs less t going to the movie

By Larry A strong in Los Ang

HOW INSURERS COVER VIAGRA

AETNA	Not covered
CIGNA	6 per month
KAISER PERMANENTE	Not covered
PACIFICARE	Decision pending (not covered in interim)
PRUDENTIAL	Decision pending (not covered in interim)
BLUE CROSS/ BLUE SHIELD	Varies (Blue Cross of Calif.: 6 per month)
UNITED HEALTHCARE	8 per month

THE MORNING AFTER



DATA IMS HEALTH INC

COMMENTARY

By Amy Barrett

THE BIG HOLE IN THE DRUG SAFETY NET

It's almost a grim routine by now: After the Food & Drug Administration gives the go-ahead for a ew drug, the product is yanked om the market when some unforeeen problem arises. In the latest inance, American Home Products orp. announced on June 22 that it as pulling its painkiller Duract om the market after four patients sing the drug died and eight needed ver transplants. The move came ıst two weeks after the hypertenon drug Posicor was yanked be-

ause in some patients it caused othr drugs they were taking to build p to dangerous levels. And it was ıst last fall that the diet drugs ondimin and Redux were withrawn after data showed the two ight cause heart-valve damage.

TIGHTER SHIP." All four cases highght a serious weakness in the curent U.S. regulatory system. The DA has accelerated its review rocess, and record numbers of new rugs are coming to market. But the ystem fails to provide comprehenive data on what happens after harmacies start dispensing them—o determine whether and to what xtent people are injured as a result f taking them. Regulators need a ystem to identify problems earlier nd let health-care providers come p with strategies for stopping them. We need to run a tighter ship in racking drugs when they hit the narket," says Thomas J. Moore, a George Washington University Medical Center senior fellow.

Is the FDA's faster drug-approval process to blame? Not really. While the agency requires extensive clinical trials before approval, such tests can't detect many problems that arise in widespread use. Trials are conducted under tightly controlled conditions. Participating physicians carefully monitor dosages and track what else patients are taking.

The real world is never that neat. Many patients taking a new drug will have other serious conditions or be taking other medications. And because doctors can prescribe drugs for conditions other than those for which the drugs are approved, drugs often are used in ways trials can't anticipate. Duract was only approved for 10-day use, but most of the patients who had problems were taking it for longer periods. In addition, even large trials may be too small to pick up rare side effects. "We always learn more about a product after it is approved than before," says Dr. Michael A. Friedman, acting FDA commissioner.

What can be done? The easiest step is to beef up the system for tracking bad drug reactions. Today, physicians and pharmacists voluntarily report adverse drug incidents to the FDA, while drugmakers are required to report any incidents they hear of. But many go unreported by healthcare providers. A controversial study in the *Journal of the American Medical Assn.* in April estimated that up to 100,000 deaths in the U.S. in 1994 were related to adverse drug reactions. The FDA's system showed just over 3,500 such deaths that year.

There are a number of ways to improve the system. Dr. David W. Bates, associate professor of medicine at Harvard Medical School, says the program for tracking hospital-acquired infections could serve as a model. Infectious-disease experts use ongoing surveillance at selected hospitals to estimate the incidence of in-

FATAL FLAW?

The system doesn't adequately track bad reactions once a drug is on the market

fections that develop in U.S. hospitals. Bates says a similar program to monitor prescription drugs "could identify strategies for reducing the likelihood of what are now seen to be unpredictable reactions."

The FDA could also be more aggressive about hunting for drug problems. George Washington's Moore says that by monitoring data about certain illnesses such as aplastic anemia, a bone-marrow disorder frequently caused by drugs, problems could be spotted quickly. The FDA's Friedman says the agency is looking at such programs and is trying to improve the FDA's statistical expertise to spot trends earlier.

Such a system will not come cheap. Fees levied on the industry can only be used to fund the drug approval process, so the FDA remains on a tight budget to fund other activities. The agency spends about $9 million a year to track approved drugs. Drugmakers say they aren't aware of the FDA needing more money for oversight, but they would do well to push for it in this case. New drugs will be a harder sell if the public questions the strength of the regulatory safety net.

Barrett covers the pharmaceutical industry from Philadelphia.

SPORTS BUSINESS

NBA PLAYERS GRAB THE BALL

With a lockout looming, they may try suing the league

Michael Jordan may soon bow out of pro basketball, but not before the Chicago Bulls superstar takes one last jump shot against the National Basketball Assn.

Three years ago, Jordan and New York Knicks center Patrick Ewing pushed the National Basketball Players Assn. to adopt a hardball labor strategy in an attempt to fend off the demand by NBA owners for a player salary cap. Their plan: disband the player's union, then file a federal antitrust suit against the NBA.

Sure, it sounds crazy to junk the union for a better labor pact. But sports leagues are vulnerable to antitrust suits, because owners collectively limit some players' salaries through caps. And a 1992 federal court ruling involving the National Football League found leaguewide labor rules are exempt from antitrust law only if owners are in a bargaining relationship with a union. So no union, no antitrust exemption.

WHO'LL FLINCH? It was a clever strategy. But in 1995, not enough players would go along. The union swallowed a new contract and a new ceiling on salaries. Now, the NBA wants an even lower cap and is threatening to lock out players on July 1 unless they agree. But this time, a more united association—with Ewing as president—seems ready to embrace decertification.

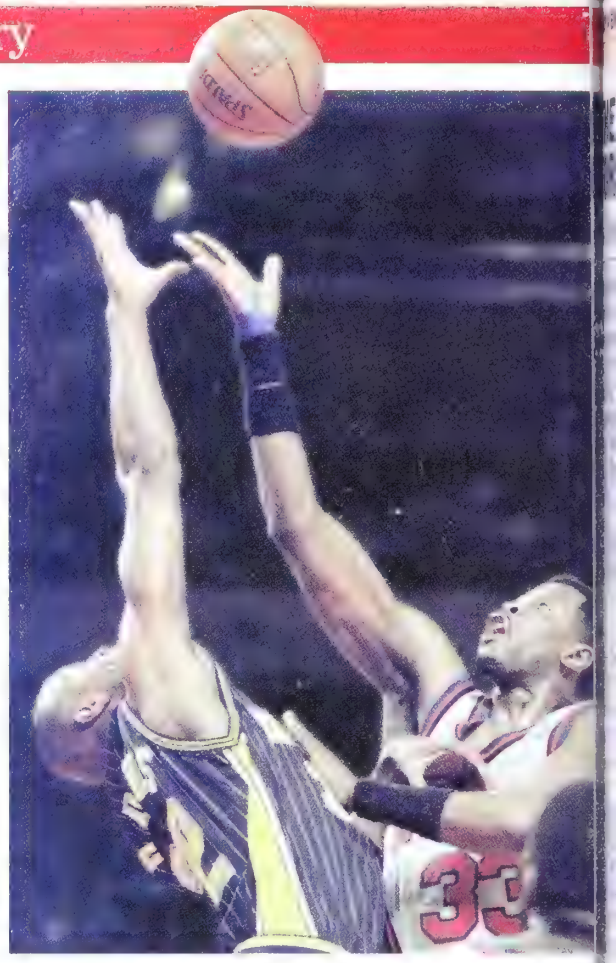
Which side will budge first? Both will suffer if there's no season: The players would have no pay at all. And the NBA will be facing an uphill legal battle. After all, the NFL was forced to compromise on its salary restrictions after a jury ruled that players could decertify their union and bring antitrust charges.

More broadly, both sides run the risk of damaging the public image of basketball—the only major sport that has never alienated fans with a messy labor shutdown. A delayed season could dent the NBA's stellar record of fast revenue growth. "Decertification is just a bargaining tactic; the only way out is to negotiate a fair deal," says NBA Commissioner David J. Stern.

Stern is ready with his own tactic if players decertify. His plan: ask the National Labor Relations Board to charge the union with failing to bargain, as federal labor law requires. If the board agrees with the NBA, players couldn't argue in court that their union has been disbanded.

The NBA is holding firm because the tighter cap it won in 1996 hasn't worked. Salaries have jumped from 46% of league revenues in 1994 to 57.5% this season (chart). In March, unhappy owners reopened the 1996 pact. In addition to a lower salary cap, they want players to abolish the so-called Larry Bird exemption. The clause allows teams to exceed the cap to resign their own players, as the Bulls did to pay $33 million for Jordan this season. This has driven up salaries and produced a leaguewide loss of $44 million, NBA officials claim.

The players don't buy the NBA's numbers. They also point out that a fat new TV advertising pact, worth $2.6 billion over four years, will lift NBA revenues to $2 billion next season, up from $1.74 billion this year. So even if salaries jump by 20%, to 60% of revenues, the league would still have $60 million more left over than it did this year.



GOING FOR IT? Led by Ewing (right), the union could decertify. Th would allow it to file an antitrust lawsuit against team owners–a tactic that worked for NFL players

The union has more unity now t in 1995 to make its position stick. sides having the popular Ewing as president, it has rehired Jeffrey Kessler, a partner at New York firm Weil, Gotshal & Manges. Kess had helped to plan the 1995 decertif tion attempt and was a key archit of the football players' lawsuit. This s son, the association's director, G. Will Hunter, got a majority of players to thorize the union to disband if it sees "The owners are forcing a battle o something they know the players w agree to, which is a hard salary ca says Kessler.

If the NBA does lock out the play the union leaders probably will tak vote on decertification at their ann meeting in Hawaii on July 6. But real crunch won't come until the t when teams must line up players the new season. If no one has bud by then, you may see more fancy n neuvers in a law court than on a b ketball court.

By Aaron Bernstein in Washing

E PROMISED LAND R OUTSOURCING?

onnecticut moves to farm out info tech, suppliers drool

gine renewing your driver's license m the comfort of home, using your nputer. Or government agencies the ability to share information, ing such debacles as a foster fami- arged with abuse by one agency licensed to offer day care by an- . That's the vision that is being of- to voters by Connecticut Governor G. Rowland. He wants to hand virtually all of the state's informa- echnology systems, covering some encies, to a private company in a -year, $1 billion -the most sweep- government out- ing effort by any "I want our gov- ent to be smarter, r, faster," says and.

did governors in states who have dered—but backed from—major out- ing deals, a prac- already common in private sector. In na and Iowa, gov- 's abandoned such es after facing e opposition from politicians and oyee unions. Row- a popular Repub- has faced nearly years of efforts to l his privatization . "It's been pretty l at times," admits g "Rock" P. Regan, state's chief infor- on officer.

OOD? But Connecti- could be on verge of a break- gh. In July, a state is expected to fi- choose a winning r, which will move ard to cement a act. That could lead flood of similar in other states. think there are at 20 states that will v" within the next years, predicts ard Anderson, managing director of Yankee Group Inc., a Boston-based technology consulting firm. "They can probably each save 15% [on information-technology spending], and that's the low-hanging fruit." Connecticut alone spends about $250 million a year on information technology and expects to save about $50 million annually.

The big guns of the nation's $149 billion information-technology services business are eager to penetrate the market offered by state governments. Computer Sciences Corp. of El Segundo, Calif., which is bidding on the Connecticut contract, figures that the state outsourcing market could reach $12 billion annually in five years. CSC is competing with Electronic Data Systems Corp. and IBM to nail down the pivotal Connecticut deal.

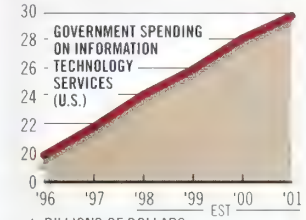
EDS has been running "advertorials" in the *Hartford Courant* promising job security and better career opportunities for state technology workers. EDS also vows that it can provide "uncompromising safeguards" to protect data privacy—countering concerns raised by opponents of outsourcing. And it has announced that, win or lose, it will open a new technical center that it says would create 300 jobs in downtown Hartford. William M. Dvoranchik, the EDS executive spearheading the company's Connecticut bid, says EDS Chief Executive Lester M. Alberthal Jr. flew in last July for the company's oral presentation of its bid. IBM's chief wasn't there, "and they're only a couple of miles away," he snipes. "We're not going to respond to that," says an IBM spokesman.

BIG HURDLE. But CSC may have the inside track. In March, it disclosed that it had offered an "alternative" bid in partnership with the Connecticut State Employees Assn., as well as a separate bid on its own. The union, representing about 450 state technology workers, has also submitted its own bid. "One of the first hurdles that has to be overcome in the privatization is to win the hearts and minds of the people," explains Paul M. Cofoni, president of CSC's technology management group. Adds Robert D. Rinker, director of the union: "It's a colossal mistake on the part of the state to exit the business because it's never been done before." A partnership, he says, would let the state disentangle itself more easily if outsourcing flops.

Regan insists that the competition isn't over, despite favorable comments about the CSC-union bid by Rowland and some Democratic lawmakers. But the union has vowed that if anyone else wins the contract, it could try to block a deal. Indeed, any pact still could be vetoed by a 60% vote of the state legislature. Then the anointed outsourcer must turn Connecticut into the technology showcase Rowland has promised. "Whoever wins it had better do a good job, because this is going to be the poster child," says consultant Anderson. And if it can work for the states, could Washington eventually fall in line, too?

By Wendy Zellner in Dallas

A PRIZE TO BE PRIVATIZED



CIO REGAN: *Opposition to the plan has "been pretty brutal at times"*

In Business This Week

EDITED BY KELLEY HOLLAND

BACK DOOR AFFIRMATIVE ACTION

HOW TO GET AROUND THE U.S. Supreme Court? Very, very carefully. The Clinton Administration on June 24 created a new program that gives some minority firms preferential treatment in bids for federal contracts—without violating a three-year-old Court ruling striking down an affirmative action program. The new plan, which does not need congressional approval, will give minority firms a small advantage if the Commerce Dept. concludes that their share of federal business is smaller than their overall market share. But to comply with the court ruling, the plan does not create quotas or guarantee that minority firms will be selected. President Clinton says the program "will help level the playing field for firms that have suffered from discrimination." Among the sectors most affected: financial services, transportation, and electronics.

KELLOGG'S NEW NO. 2 HAS HIS BOWL FULL

CARLOS GUTIERREZ NEEDS TO snap to it—and crackle and pop, too. The newly anointed Kellogg president is also the new heir apparent to Chairman Arnold Langbo, 61. Trouble is, Kellogg's market share is sagging, and Gutierrez needs to act fast to reverse the trend. Kellogg's U.S. cereal market share has dipped to 32% from 35% in the last two years. Investors are divided on whether Gutierrez should cut prices or focus more on developing new products. But they're pleased to have Gutierrez elevated to the No. 2 spot. He has proved an able executive in expanding Kellogg's business in Asia and Latin America.

MORE TAX GOODIES FOR THE GOP

IT'S CHRISTMAS IN JUNE FOR some investors and wealthy heirs. Republicans are using a veto-proof bill to restructure and reform the Internal Revenue Service to enact select targeted tax cuts. The most significant: a proposal by House Ways & Means Committee Chairman Bill Archer (R-Tex.) to eliminate medium-term capital-gains tax rates on investments held between 12 and 18 months. Archer also beat back an attempt to restore higher taxes on estates worth more than $17 million. President Clinton doesn't like these add-ons to the IRS bill, but won't try to stop the popular measure.

CLOSING BELL

YAHOOPLA!

Has Internet mania turned to Internet lunacy? Since June 10, shares of Yahoo!, the Web's leading portal company, have rocketed 29% to a lofty 148⅛ on June 23. Yahoo!'s recent lift stems from new deals between NBC and Disney and Yahoo! rivals Snap! and InfoSeek. Such interest from major media companies is fueling rumors of more deals to come. With a nearly $7 billion valuation, Yahoo! now trades at 33 times revenue compared with America Online, which trades at less than six times revenue.

CRAIG BARRETT

HAS INTEL'S CHIP COME IN?

For Intel CEO Craig Barrett, this could shape up to be an *annus horribilis*. Weak PC orders and tough competition are pounding chip prices. And the Federal Trade Commission is suing Intel, alleging anti-competitive behavior.

Can anything help? Xeon to the rescue! On June 29, Intel will roll out a blazing new microprocessor aimed at workstations and corporate servers—markets where Intel doesn't rule and margins are far higher than in sub-$1,000 PCs. The first Xeons will cost anywhere from $1,200 to $4,000 and deliver gross margins ove 90%, estimates researche Micro Design Resources. "This will blow away a the alternatives," says Mark Edel- stone, an analy with Morgan Stanley Dean Witter. "It's e tremely impor tant for Intel." Could Xeon turn into the next snafu? A week before the announcement, *PC Week* r ported bugs in the chips that work alongside Xeon Intel put out word on Ju 24, however, that there a no serious problems and that the chip will ship on time. Alas, uneasy lies th head that wears the crow

By Andy Reinhar

A COMPUTER RIVALRY ENDS IN MARRIAGE

AFTER TWO YEARS OF ON-again, off-again talks, CompUSA is headed to the altar with Computer City, a Tandy subsidiary. On June 22, Tandy agreed to sell its money-losing computer chain for $275 million in cash and a note. That will enable $5 billion CompUSA to remove its biggest rival, as falling PC prices and competition continue to squeeze computer dealers. Those factors helped push CompUSA's profits down 22% in its most recent quarter. For Tandy, the sale ends its most recent failed attempt to expand beyond its RadioShack chain.

STARVED FOR BUTTERFAT

BUTTERFAT, THE KEY INGREDIENT in ice cream, cheese, and butter, is currently in short supply, and prices responding accordin "Everybody is holding t inventory," says Robert P a board director at the Ch go Mercantile Exchange spot prices at the MERC's ter market have surged this year. Why the pi Unusual ice cream dem due to early summer he one factor. And the gov ment subsidized the expo 40 million pounds of bu over the past year, fur cutting supply.

ET CETERA . . .

- The soon-to-merge Phila phia Stock Exchange pic Meyer Frucher as new C
- How to stay warm North: Marriott will buil refurbish 40 hotels in Can
- The House passed leg tion to ban new Internet es for three years.
- Ring Dings, anyone? D Bakeries is being sold Interstate Bakeries.

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TED BY OWEN ULLMANN

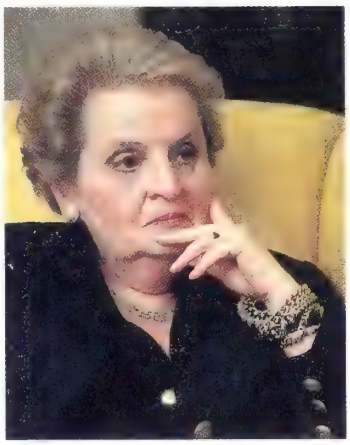
EHIND AMERICA'S SUDDEN VERTURE TO IRAN

hen Secretary of State Madeleine K. Albright made a surprise overture to Iran on June 17, she had another Mideast nation on her mind as well—Iraq. By reaching to Iran's moderate President, Mohammad Khatami, the . aims to reshape the region's balance of power with a y based on that ancient Arab axiom: The enemy of my ny is my friend.

's no coincidence that the Clinton Administration is at- pting to normalize relations with Tehran at a time when . officials fear that the U.N. will lift tions on Iraq by yearend, something Iraqi ident Saddam Hussein has sought for n years. Faced with the prospect of an nstrained Iraq, the U.S. is returning to ld policy of pitting the two nations ist one another. The counterweight strat- got a boost on June 23 when President ton vetoed legislation imposing sanctions governments or businesses that supply ile technology to Iran.

OF GOOD WILL. Although Iranian hard- s will resist dealing with the "Great Sa- ' American officials are gambling that can do business with Khatami and keep lam in check. An immediate test will be 's cooperation in stanching Iraqi oil smug- g. "There are things Iran could do to with containment of Iraq," says a top . foreign policy official. "They could do those early on as monstration of their seriousness."

ne earlier, the better for the Administration. While there ew evidence that Saddam equipped missiles with deadly e gas before the 1991 gulf war, America's prospects for ing the squeeze on Baghdad is still shaky. Pressure from nce and Russia to lift sanctions will grow in October n a U.N. inspectors' report may conclude that its work nantling Baghdad's secret weapons is done.



ALBRIGHT: *A Saddam strategy?*

Of course, Saddam may again prove to be his own worst enemy by defying inspectors' demands and handing the U.S. an excuse to press for continued sanctions. But U.S. officials say Clinton and his foreign policy team have no interest in another military confrontation. In May, six months after the last showdown, the Pentagon reduced by half its massive buildup in the Persian Gulf. "Military involvement is a dwindling option," agrees Middle East expert Amatzia Baram of Haifa University. That makes the outreach to Tehran even more important.

The prospect that 20 years of U.S.-Iranian estrangement may come to an end is good news to American business. Corporate lobbyists have been pressing for a policy shift since the spring, when the Administration averted a conflict with Europe by waiving sanctions on foreign companies doing business with Tehran. But now, U.S. companies want Clinton to go further and lift an executive order barring U.S. companies from Iran. The order "leaves the U.S. out of the picture," gripes Frank Kittredge, president of the National Foreign Trade Council, an anti-sanctions group that represents such U.S. giants as General Electric, Citibank, Procter & Gamble, and Conoco.

The White House won't go that far as long as Iran supports terrorism and is trying to acquire nuclear weapons. But Clinton may make a small gesture to thank moderate mullahs for positive steps, such as peace efforts in Afghanistan and a war on drugs at home. U.S. officials concede that even a tiny step toward Tehran could be met with a swift rebuff. Still, the thought of a Saddam without sanctions makes the possibility of an international embarrassment worth the risk.

By Stan Crock, with Neal Sandler in Jerusalem and Ruth Pearson at the U.N.

CAPITAL WRAPUP

'S GONNA BE UGLY

Yet another millionaire Democratic ndidate has bitten the dust. In a sely watched race on June 23 in w Mexico, wealthy state Senator il Maloof lost to Republican ather Wilson, who will replace the e GOP Representative Steven H. hiff. If the special election is a har- nger for November, expect mega- ck, mud-slinging matches. With the publicans' narrow margin at stake d no compelling national issues, th parties will go all out in as many as 50 close contests. In New Mexico, both sides stepped up attack ads toward the end. GOP leaders put the squeeze on members of Congress, who ponied up a record $280,000 for the cash-strapped Wilson, a former Bush Administration arms negotiator.

TOBACCO: SAVING FACE

▶ Like stale cigarette smoke, debate over anti-tobacco legislation will linger in Capitol Hill corridors all summer. Anxious to show they're not in Big Tobacco's pocket after killing a mammoth bill aimed at curbing tobacco use, Republicans are readying new antismoking measures. Senator Orrin G. Hatch (R-Utah), with Senator Dianne Feinstein (D-Calif.), proposes to make tobacco companies pay $428 billion over 25 years while capping their risk from lawsuits at $5.5 billion. In July, House GOP leaders will introduce a narrow bill to curb teenage smoking. Neither measure is likely to win broad support. But if voters take interest, look for lawmakers to pass—and the President to sign—a modest bill that lets both parties claim victory in the war on smoking.

JAPAN

LAST CHANCE FOR THE YEN?

The "Total Plan" is supposed to fix Japan's bank mess –but time is short

Emerging out of the smoke-filled chambers at the ruling Liberal Democratic Party headquarters in Tokyo is something called the "Total Plan." Billed as the definitive solution to the banking mess that has been festering for a decade, the program amounts to a gigantic IOU from Japan to the rest of the world—a promissory note that commits the nation to fixing its banks before a sinking yen snuffs out hopes for a timely economic recovery in Asia. Days after a historic U.S.-Japan yen intervention, Group of Eight and Asian financial authorities won assurances from Tokyo on June 20 that a detailed blueprint of the plan would soon materialize.

If it isn't credible—and the yen is already giving up some of its rebound as doubts arise—global traders will turn on the yen and the Nikkei stock index with new rage. Even another U.S.-Japan currency intervention might not do much to prevent another round of currency jitters and market upheavals. That could send a tsunami of capital rushing out of Japan, making the banking mess even worse.

So it's crunch time for Prime Minister Ryutaro Hashimoto and the LDP. They have just a couple of weeks to come up with a plan that can work—and show that they mean to carry it out. They face a situation far more complex and dangerous than the U.S. savings and loan crisis, which took six years and $125 billion in taxpayer money and resulted in the closure of nearly 750 thrifts. Because Japanese officials kept postponing the day of reckoning, banks are sitting on $530 billion worth of dud loans. "Many of the top executives at Japanese banks feel a sense of crisis," says one at Sumitomo Trust & Banking Co. "We have very little time."

To say the least. Even after write-offs worth some $230 billion over the past five years, few of Japan's top 19 banks are safe from the type of sudden collapse that is the stuff of central bankers' nightmares. The banks' books are still choked with bad property loans after a decade-long bust that has knocked 70% off the value of commercial real est But with Japan's archaic laws on s tling property claims, the banks have been able sell off much underlying lateral. So they can't recoup any of money they lent and sweep the loans off their books.

MORE DUD LOANS. As Japan's recess spreads and corporate bankruptcies at double-digit rates, more probl loans will appear. Worse, there's prospect that up to a third of the billion extended by Japanese banks the five crisis-ridden Tiger econom in East Asia could become permanen uncollectible as well. U.S. and Eu pean banks have pretty much writ off suspect loans to those nations, Japanese bankers have barely begu

It gets worse yet. Following the lapse of Yamaichi Securities Co. commercial lender Hokkaido Takush

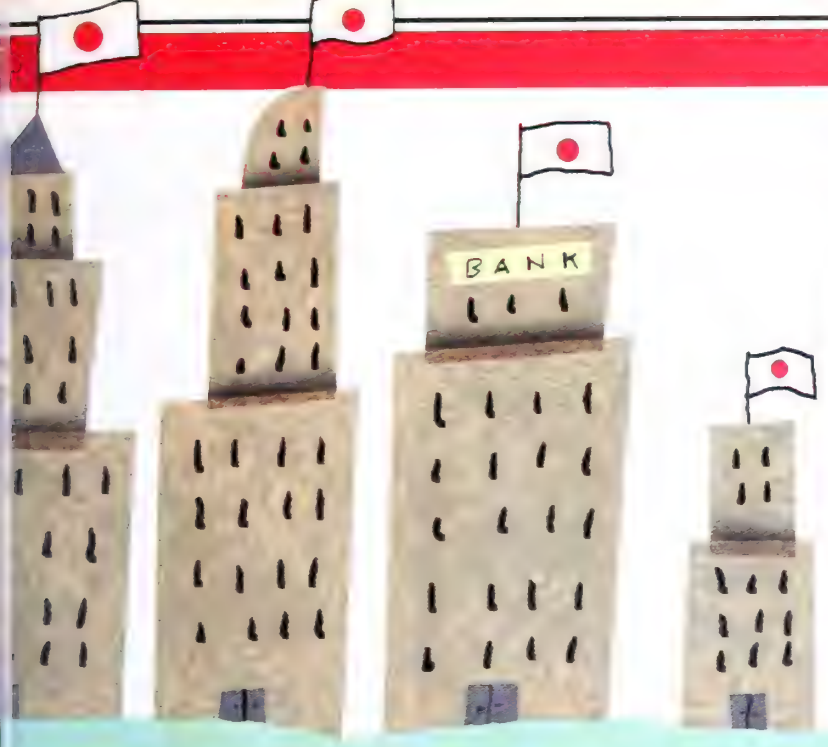
TOKYO HAS A BANK REPAIR PLAN . . .

BRIDGE BANK The Liberal Democratic Party wants a new public bank to take over the loans of failed lenders and auction them off.

DISCLOSURE Japanese lenders now classify nonperforming loans the way U.S. banks do. The Bank of Japan is fighting the Ministry of Finance for even more disclosure of loans that are in danger of going bad.

COLLATERAL To help banks unload bad r estate, Japan might streamline bankruptcy offer guarantees to sell securitized assets.

MONEY The government has set aside $21 to replenish the deposit insurance system a up the capital of weaker banks. More may b on tax incentives to help banks write off de



ate market interest for the loans and real estate it needs to repackage and sell, the government might guarantee new asset-backed securities with the $2 trillion in postal savings system deposits.

Will it work? A lot depends on whether once the new plan is in place, Ministry of Finance officials really start pulling the trigger on banks that aren't solvent. "If the government gets serious, banks are going to fail," says a former Bank of Japan official. He estimates as many as 40 banks should disappear. And it's going to be expensive. Even the $210 billion-plus that the government has budgeted for replenishing the Japan deposit insurance system and shoring up the capital bases of the banks won't be enough once banks start folding.

POLITICAL RISK. But that pales in comparison to the political capital to be spent. For starters, the bailout measures will almost certainly extend the recession, pushing Japan's already historically high 4.1% jobless rate to Western levels. It also means a real thrashing for the most coddled domestic sectors of the economy: finance, real estate, and construction.

Even if Tokyo comes up with the right plan, it then must time its execution carefully. If it goes too fast, there could be a financial panic as depositors withdraw even more massive amounts of yen from the banking system. With the government's Big Bang overhaul of Tokyo's financial markets, outfits such as J.P. Morgan, Fidelity Investments, and others are ready to grab that money and place a good chunk of it in offshore markets with high returns.

Of course, if Hashimoto can restore some confidence and pull off Japan's makeover in a credible and orderly way, it "would mark a turning point for the crisis in Japan," figures Deutsche Bank economist Kenneth Courtis. But if the "Total Plan" is to be effective, there must be a major shift in the Japanese mindset, with everyone from lowly loan officers to mighty Ministry of Finance chiefs suddenly becoming more ruthless. Ultimately, that could spell the end of Japan's era of fail-safe capitalism.

By Brian Bremner in Tokyo

s Ltd., ordinary Japanese have
d their yen out of weaker banks.
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ngs system controlled by the gov-
ment—or heading overseas in search
igher returns. That's eroding the
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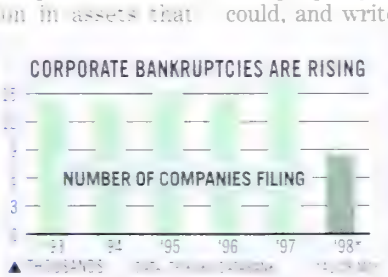
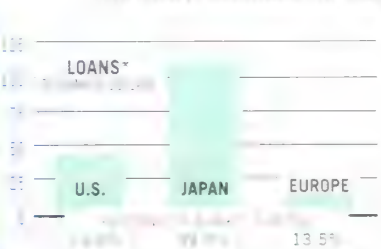
ey at home and abroad.
ittle wonder that all sorts of grim
ors are flying in Tokyo. The latest:
imminent cash squeeze at Long-
n Credit Bank of Japan Ltd. It's a
with $190 billion in assets that

was a primary conduit of government-directed lending to industrial Japan after the war but jumped into real estate lending during the bubble era. Now, LTCB has $9.4 billion in bad debts. And investors have dumped its shares, fearing that it can't roll over some $87 billion worth of unsecured bonds.

With bad news mounting daily, Hashimoto wants to call a special "bad bank" session of the Diet to push through a legislative package to bring the banking crisis to an end. On July 8, Hashimoto is expected to take the first step by announcing plans for a new "bridge bank" that would take over banks' failed operations. The powerful institution would have the authority to send out inspectors to survey the damage around the industry and to fire poor managers. It would be empowered to sell off whatever loans and property from bank portfolios it could, and write off the rest. To gener-





HONG KONG

'HONG KONG HAS LOST ITS TOUCH'

The economy is tanking, and things could get worse fast

It was only a year ago that Hong Kong was awash in light. As the British colony prepared to return to Chinese sovereignty, dazzling technicolor displays marked the occasion. Now, 12 months later, the neon and fireworks are a dim memory. There's little to celebrate in grim Hong Kong.

Yes, Chinese President Jiang Zemin and U.S. President Bill Clinton are coming through to mark the anniversary, and the territory is about to open a $20 billion airport. But the economic news is going from bad to worse (charts). Hong Kong has plunged into its first recession in 14 years. Unemployment is surging. Property prices have fallen by half. Although companies from banks to retailers are retrenching and switching strategies, analysts predict a jump in bankruptcies and bad loans in the second half. "The mystique of Hong Kong is fast disappearing," says Peter Lau, CEO of clothier Giordano International Ltd. "Hong Kong has lost its touch."

A desperate Chief Executive Tung Chee-hwa is resorting to drastic measures. He announced a $4.1 billion economic-stimulus plan aimed at shoring up the failing property market, by curtailing sales of government land, and pumping liquidity into the banking system. It freezes upper-tier civil-servant salaries, provides property-tax rebates, and reduces taxes on corporate bank deposits.

In the midst of the crisis sweeping Asia, Tung is struggling to maintain the Hong Kong dollar's peg to the U.S. dollar to keep the territory solvent. That has become harder in recent weeks, as the yen has fallen and as worries about China's ability to avoid devaluation have grown. The high interest rates needed to defend the Hong Kong dollar have wreaked havoc, and the Chief Executive is feeling the heat from Hong Kong's jittery business and political elite.

AIR-RAIL TERMINAL: *Amid the gloon a new $20 billion airport is openin*

The problem is, there's little Tu can to do except try to ease the p The property cartel that has long d inated the economy is weakening. Ba with huge exposure to the prope market are watching warily as ho owners who bought property in the p two years are stuck with negative uity. And Tung's pro-business political lies, who suffered big losses in M elections, have even joined forces w Martin Lee's Democrats to denou his policies. With another election l than two years away, the governmen especially keen to blunt criticism tha has done little to stem the recessio

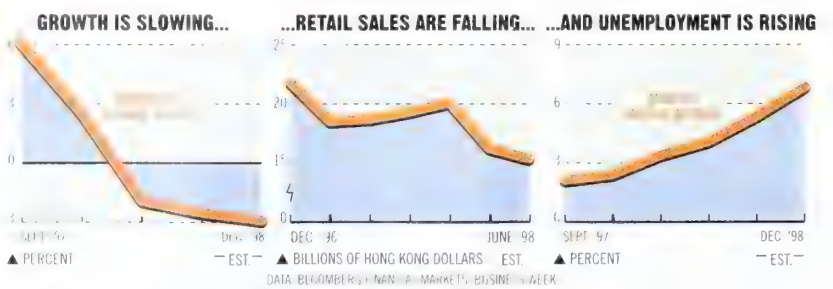
PROTRACTED SLUMP? Tung's new m sures come just a few weeks after earlier rescue plan failed to spur a covery. These are likely to meet same fate. Standard & Poor's Corp reviewing the credit ratings of a do Hong Kong blue-chip companies cit "the growing likelihood of a protrac economic downturn."

In fact, Tung's plan may make thi worse. It calls for a budget deficit w about 5% of Hong Kong's gross dom tic product. Currency speculators mi see that as a sign of weakness and tack the Hong Kong dollar, causing terest rates to spike again. "That c wipe out whatever positive impac generated from the budget deficit," tions Dong Tao of Credit Suisse F Boston Corp., who sees unemploym rising to 7% by the end of the y And to compensate for the loss of enue from land sales, officials are d ping hints that the government mi need to institute a new sales tax.

The property collapse—and overni interest rates as high as 16%—have banks to halt new lending. Banks h built up a staggering exposure to real estate market, with nearly hal all loans in the property sector. C about 2% of loans are nonperform but the number could be 8% by n year. "The bank system is in d trouble," says Pe D. Everington, b ish chairman of H Kong's Regent F Management Ltd property prices much more, "na things will start happen." As if t haven't already.

By Bruce Einh in Hong K

HONG KONG'S DOWNHILL RUN



DATA: BLOOMBERG, HANG SENG MARKETS, BUSINESS WEEK

ESSONS FROM IE EUROPEAN TIGERS

v several small nations got their economies growing fast

hen Connie van Kints was laid off last year from Ovis, a Dutch bakery company, it took her only months to find a new job at the pay. The 53-year-old grandmother reconfigures hard-disk drives at ed Parcel Service Worldwide Lo-s' high-tech warehouse in the small rn city of Roermond. Opened in the UPS facility employs 60 people, ring four more per month, and will ease its space by one half by end. "We're having a hard time find-enough workers," says senior sales utive Theo de Vlieger. No wonder: mployment in the Netherlands has n to 4%, a 17-year low. Meanwhile, miles away across the border, Ger-joblessness tops 10%.

urope's big economies have a lot to n from its smaller ones. While ice and Germany will be lucky to in gross domestic product growth veen 2.5% and 3% this year, Fin-, Ireland, the Netherlands, and Por-l are growing faster—in some cases h faster. It's not dumb luck, either. er to qualify for the first round of opean monetary union in 1999, Eu-rope's little tigers have done more than just wrestle down their budget deficits and interest rates. They also have tackled politically sensitive, structural economic reforms that most core countries have scarcely started (table).

FLEXIBLE. Now their efforts are bearing fruit. Building on its 10% corporate tax rate for manufacturing and international services, Ireland has attracted dozens of foreign multinationals and nurtured a boom in technology and finance. After a wrenching recession in the early 1990s, Finland boasts a restructured manufacturing sector that is among the world's most competitive, plus a thriving electronics industry, with global cellular star Nokia Corp. at its center. Flexible labor laws and wage restraint have turned the Netherlands into a low-cost exporter. And tiny Portugal, thanks in part to a sweeping privatization program, grew faster than any other Continental European Union country last year, at 3.5%.

As the EU prepares to adopt a common currency, the tigers' strong growth is raising some concerns. When the new European Central Bank begins setting monetary policy for the entire euro zone on Jan. 1, it will look at the zone's average economic strength. That means Europe's fast-growing tigers could get stuck with interest rates too low to keep inflation in check. "There is some danger of overheating," warns Pedro Braz Teixeira, head of fixed-income research at Spanish bank Banco Santander de Negocios Portugal.

For Europe's small economies, the trick will be holding the line on wages and applying taxes judiciously. Ireland's steamy growth rate and the punt's 15.1% drop against sterling over the last year could push inflation above 5% for 1998, from 1.5% in 1997. Yet experts say that with prudence on wages and taxes, Dublin can keep the party going. That will mean offsetting election-year demands for cuts in sky-high income taxes with national wage agreements that keep labor costs competitive.

What may help is

WHERE THE SIZZLE IS

FINLAND

s lowered taxes on all ome levels. Under-nt massive industrial tructuring that boost-average operating rgins in manufactur-to 12.6%. Follows a ict fiscal and mone-y policy. Estimated 98 growth: 4.5%

PORTUGAL

Privatized several state-owned banks, Portuguese Telecom, cement and electricity giants, and others. Created private pension funds that are fueling a boom in financial services. Estimated 1998 growth: 4% to 4.5%

THE NETHERLANDS

ows companies to e temporary and part-ne workers. Held wage reases to 0.3% a year m 1990 to 1997. Cut ial security taxes m 47.5% to 44%. Esti-ted 1998 growth: 3.5%

IRELAND

Cut corporate taxes to 10% for manufacturers, some services, and software. Has kept a lid on public spending. Estimated 1998 growth: 8.25%

DATA: BUSINESS WEEK

that the tigers have made huge progress toward flexible, competitive labor markets. Ireland, Denmark, Finland, and the Netherlands permit overtime, weekend work, and even layoffs to be negotiated between unions and their employers. In core Europe, by contrast, national regulation still governs such issues and keeps costs high. Hourly total compensation in Germany is $31.87, vs. $14.12 in Ireland.

In addition, the smaller economies have seen the benefits of modest pay increases. Explains Dutch Prime Minister Wim Kok: "Workers have said, 'O. K., we will abstain from wage increases, but in return we get jobs.' My job has been organizing this trade-off."

STOCKS SOAR. The tigers also have core Europe beat when it comes to supplementing old-line manufacturing with high-growth services. In Finland, cellular technology has spawned not just $10.5 billion Nokia but a host of job-creating startups. Finnish industry has revamped, cutting costs and shedding marginal businesses. In 1997, industrial operating margins averaged 12.6% of revenues, compared with negative numbers in the early '90s.

Portugal, meanwhile, is pushing aggressively into financial services. In the banking sector, growth has been fueled by privatization of all but one state-owned bank over the past few years. Their profitability is impressive. The top three private banks posted returns on equity of 19% to 25% in 1997. And the privatization boom has powered the Portuguese stock market, up 78% in 1997 and 43% year-to-date. For newly private companies, that has meant a pile of fresh capital to grow in emerging markets such as Brazil. "I will pay for my expansion from cash flow," beams Miguel Horta e Costa, vice-chairman of Portugal Telecom, which intends to bid for a chunk of Brazil's Telebras.

As the tigers race ahead of France and Germany, pessimists fear Europe isn't ready for monetary union yet. Brendan M. Walsh, economics professor at University College Dublin, worries that Ireland's boom will raise pressure for income-tax cuts—the last thing a fast-growth country needs. Yet others are sanguine. Robert A. Mundell, economics professor at Columbia University, for one, believes improved productivity in Europe's hot economies will let wages rise faster than prices. "It sounds foolish for the Irish to be complaining," he adds. For the moment, Europe's tigers should probably be boasting instead.

By Joe Weber in New York, with bureau reports

FRESCO: *His pay may be linked to performance*

ITALY

MANAGEMENT, AMERICAN-STYLE

Fiat's new boss, after all, was Jack Welch's understudy

Shareholder value. Transparency. Customers coming first. They are commonplace concepts in Corporate America. And true, they are starting to be heard in some European executive suites. But when Paolo Fresco, named as chairman of Italian auto maker Fiat on June 22, throws them around in his very first talk to shareholders, it's a sign that a bold new era just might be beginning at one of Europe's biggest companies.

Fresco's refreshing words reflect the lessons he learned at General Electric Co. The 65-year-old Milan-born lawyer spent 36 years at GE, including the last six as deputy to Chairman and CEO John F. Welch Jr. "Fresco's experience from GE will be his main contribution to Fiat," says Fiat CEO Paolo Cantarella, who stands to be Fresco's key ally. Some Welch-style decision-making could have far-reaching effects throughout the Turin-based giant, with sales of $54 billion. Fresco has broad mandate f the Agnellis, who 30% of Fiat. Look him to dump marg businesses, pump the winners, and haps finally help Fiat a merger part

Fresco's compe tion package sh please shareholde While Fiat won't c ment, his pay thought to be linke Fiat's share price. would be remark in Italy, where clu insider dealmaking ten takes precedence over boos share price. Fiat shares have risen over the last 12 months, but that's than half their level of 12 years ag

SMOOTHER OPERATOR. Fresco's proach, say insiders, will be mark different from that of predecessor sare Romiti. He was a brilliant mana but his gruff style often antagonized bor, government, and even the busi Establishment. In contrast, Fresc known as a smooth global player.

Although Fresco doesn't offici start full-time until his GE duties v down in October, the pressure is ready uncomfortably high on Fiat. H Italian government incentives on r car purchases, which sent car sales s ing 40% last year, end on July promising to deflate Fiat's most im tant single market. When quotas Japanese cars come off next yea could hit Fiat in its bread-and-bu small- and midsize-car business.

Fiat has already been getting shape. A $2 billion bet to manufactu "world car" in such countries as Br Argentina, and Turkey is giving Fi headstart in high-growth markets of future. And since 1995, Fiat has steadily selling off noncore assets leaner, more focused group will m it easier for Fresco to accomplish a part of his agenda: negotiating the r strategic alliance. Such a linkup se even more crucial now that Dair Benz and Chrysler are merging.

Fiat's new duo looks formidable, international dealmaker Fresco ey strategic linkups while nuts-and-b car man Cantarella makes sure F new models are winners. Throw few concepts from the school of Ch man Welch like shareholder value, Fiat's future could be surprisi bright.

By John Rossant in R

> Fresco is expected to cut marginal units, bolster winners, and perhaps merge

O TAX MAN VER HAD IT TOUGHER

ris Fyodorov undertakes a crucial crackdown on cheats

oris G. Fyodorov, 40, was recently appointed to one of the toughest jobs in Russia. The new director of State Tax Service must find ways improve Russia's chronically poor collection record. Only 5 million of 150 million citizens hand in tax urns. Companies regularly stash ir income overseas. And industrial ups favored by the government e been allowed to ignore taxes with unity.

Fixing Russia's tax system is key to stabilizing the country's precarious finances—and persuading both international investors and the International Monetary Fund to pump more money into the economy. Without a financial package to shore up its dwindling hard currency reserves, Russia may be forced to devalue its ruble, striking a serious blow to its reform process. On June 23, Russian Prime Minister Sergei Kiriyenko and President Boris N. Yeltsin asked the Duma to approve an anticrisis package of tax and spending cuts, aimed partly at meeting IMF demands for radical action.

Fyodorov, a straight-talking banker and former Finance Minister who helped fight Russian inflation by slashing industrial subsidies a few years ago, is also moving quickly to crack down on tax delinquents. He is denying oil companies that do not pay their tax bills access to export pipelines. He is creating a database of the country's 1,000 richest citizens and checking up on their tax payment records. And to show he means business, on June 20, Fyodorov toured Moscow markets and gas stations to check how many were providing receipts, a sign that they record sales and pay taxes. None were. Now he has launched a massive campaign to ensure merchants use cash registers.

It's a good start. But Fyodorov, like his predecessors, will have a hard time succeeding.

By Patricia Kranz in Moscow

'NOBODY IS PAYING'

Russian tax czar Boris G. Fyodorov discussed his challenge with BUSINESS WEEK *Moscow Bureau Chief Patricia Kranz*

Q: *What should be done to improve Russia's tax collection rate?*
A: I propose that we have one personal income tax rate—20% [rather than the current graduated rates of 12% to 35%]—but levy it on everything that people get in money form. This would increase the amount of taxes collected twofold or threefold. We should go for a sales tax and hit taxpayers directly at the point of consumption. We should simplify the tax system and make it more transparent and easier to collect. Such things as the [35%] profit tax on corporations—we can cut that in half. There's very little money coming from there, and nobody is paying.

Q: *What has changed since you took over the State Tax Service on May 30?*
A: It is clear that in certain government bodies there wasn't the will to go against certain companies, such as Gazprom. Today, nobody can say that the State Tax Service doesn't avail itself of the authority given to us. All over the country, we have started trying to take over the accounts and property [of tax delinquents] and, sometimes, the debts owed to them. This process raises a lot of noise and hatred. But this will help [newly appointed financial envoy Anatoly B.] Chubais in his negotiations with the International Monetary Fund.

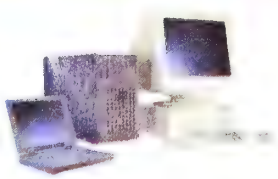
TWO FOR TEA? *Fyodorov favors point-of-purchase taxes*

Q: *The government has promised many times in the past to collect more taxes, but failed.*
A: The government shouldn't be one big tax police force. The question is whether Russia's fiscal or economic policy is right. The federal government doesn't get revenue from citizens because [any income tax they pay] goes to local authorities, and most citizens don't pay taxes. There are, for example, some 100,000 foreigners in Moscow. But how much is paid in taxes? Peanuts.

Q: *Have Russia's "oligarchs"—the business elite—been paying taxes?*
A: Most of the oligarchs have declared incomes in excess of $1 million. I don't know whether that's high enough. We will know in the future. And [they] paid taxes on it, which is good. These guys are more interested in creating a "normal" situation than those who don't have money. As in the U.S., those with incomes of $500,000 or more have higher compliance rates than those making less than $50,000. Hopefully, we will see the same in Russia, at least with the oligarchs.

Q: *How much did you pay in personal income tax last year?*
A: In 1997, I was a deputy of parliament and got a small salary. I have declared it. [Now,] my salary as a Russian minister is 6,000 rubles, or $1,000, per month. You've heard the expression, "It's O.K. to talk about lovers, but not money..." I won't say.

Q: *What will be the repercussions if the Russian government doesn't solve its fiscal problems?*
A: If we don't, we will get into a very bad situation where revenues won't be collected at rates high enough to pay for government programs. It will be very, very dangerous. One has to take action.



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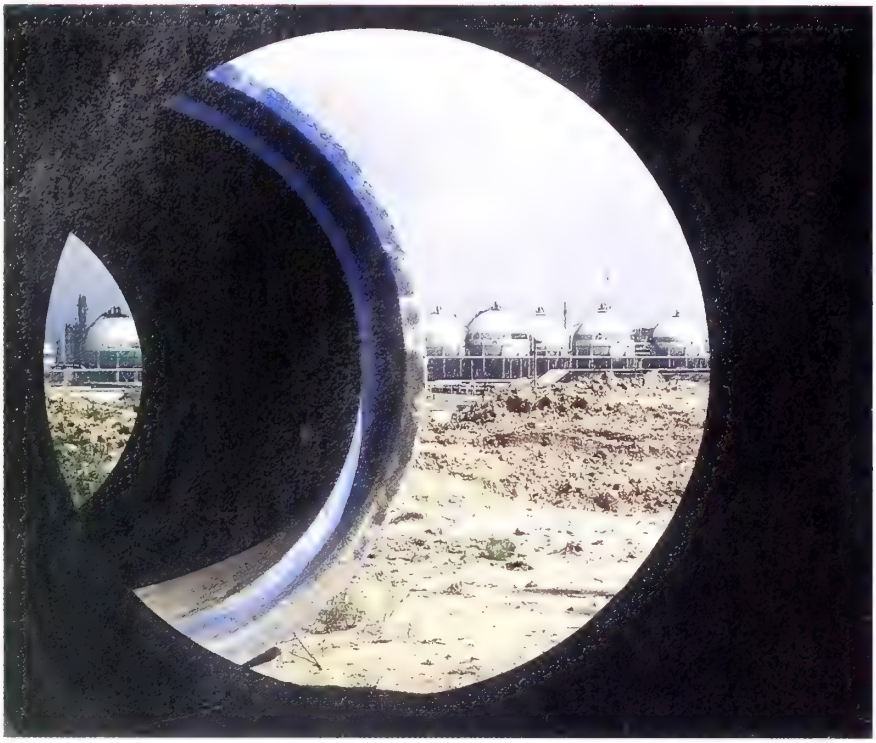


MEXICO

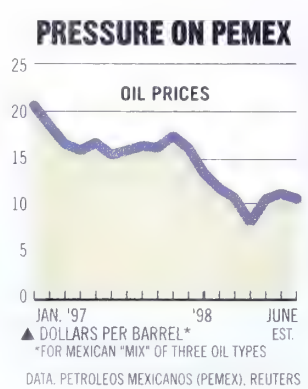
WHY PEMEX IS IN A PINCH

It needs capital badly, but it won't sell stakes to foreigners

After years of peso pinching, Petróleos Mexicanos (Pemex) finally got what it wanted: approval for its most aggressive investment program in two decades, one that would dole out $20 billion from 1997 through 2000. Officials of the state oil monopoly began retooling aging refineries, boosting natural gas output, and sending billions of dollars in fresh oil revenues flowing to the hard-pressed Mexican government.

But then came this year's plunge in oil prices (chart), and the government got cold feet. It clipped Pemex' planned $8 billion in investment this year by $700 million—and more cuts are on the way. Although Mexico agreed on June 24 to join OPEC members in trimming output to raise oil prices, the move seems unlikely to improve the outlook much for the market, or Pemex itself. "Pemex is a mess because spending cuts put it well below the spending levels needed to improve exploration, production, and refining," warns Rogelio Ramírez de la O, an energy consultant in Mexico City.

Indeed, a mix of falling oil prices and Mexican nationalism has Pemex in a bind. With nearly 32% of Mexico's $100 billion in tax revenues flowing from Pemex oil fields and fuel sales, the state should be doing all it can to reduce Pemex' notorious inefficiencies. But that's not the way things work in Mexico's oil patch. Boxed in by its social commitment to provide jobs, Pemex won't shrink its 114,000 workforce to save money. And a full 60 years after its nationalization, the proud monopoly has no intention of raising much-needed capital by selling stakes to foreign companies.



Such stubbornness puts a strain on the Mexican economy. Pemex will have to spend some $1.4 billion to import 25% of the gasoline used by Mexicans this year. That hurts at a time when revenues are expected to fall as much as 12%, to about $28 billion, by yearend. Over the next decade, Pemex will need some $55 billion to develop reserves and build refineries to meet demand at home, says Moody's Investors Service.

CREDIT HOLE? *Pemex must borrow to upgrade plants*

Mexico is far behind its Latin neighbors when it comes to using outsiders' money to spur revenues. Venezuela's state-run oil monopoly, PDVSA, has been auctioning tracts to foreign oil companies for exploration for two years. Brazil is inviting in outsiders to tap its oil potential. Pemex Chief Financial Officer J. Manuel Romero argues that Mexico's reserves are so easy to exploit that Mexico doesn't need foreign equity participation. "Here we wouldn't be sharing risk, we'd just be sharing profits," he says. But he admits, with oil prices plunging, Pemex will now have to borrow up to $7 billion on international debt markets to finance its investment program over the next two years.

SMALL STEPS. With privatization taboo, Pemex has taken smaller steps to lure foreign partners. Last fall, it awarded a $1.6 billion contract to a group including Korea's Sunkyong Engineering & Construction Ltd. and Germany's Siemens to renovate its Cadereyta refinery in Monterrey. Pemex also accepted a $1 billion bid from a group led by Britain's BOC Holdings to build, own, and operate a nitrogen-injection plant that will pump gas into wells to boost production in the Cantarell field. And Mexico is stepping investment in pipeline construction and natural-gas distribution. Some $4 billion in contracts could be awarded over the next five years.

There are some signs that the pressure on Pemex may eventually force it to change. A recent opinion poll shows that 43% of Mexicans believe Pemex should remain under state control but act more like an efficient corporation. Some officials want to add prominent businesspeople as independent directors to Pemex' board. Others would like to spark a public discussion on private investment in Pemex. "Now that Mexico has a multiparty political system, these things can be discussed," says Energy Undersecretary Jorge A. Chávez.

With oil revenues evaporating, Mexico may have to speed up the deal. The government has already cut the 1998 federal budget twice, by a total of $2.8 billion. Another cut is expected in mid-July. Budget worries have depressed the stock market and weakened the peso. Politicians still see oil as part of Mexico's patrimony. If government finances weaken, they may want to look at oil as just another commodity.

By Geri Smith in Mexico

PEOPLE IN KENTUCKY BREED HORSES THAT SELL FOR MILLIONS OF DOLLARS

Luckily they also produce

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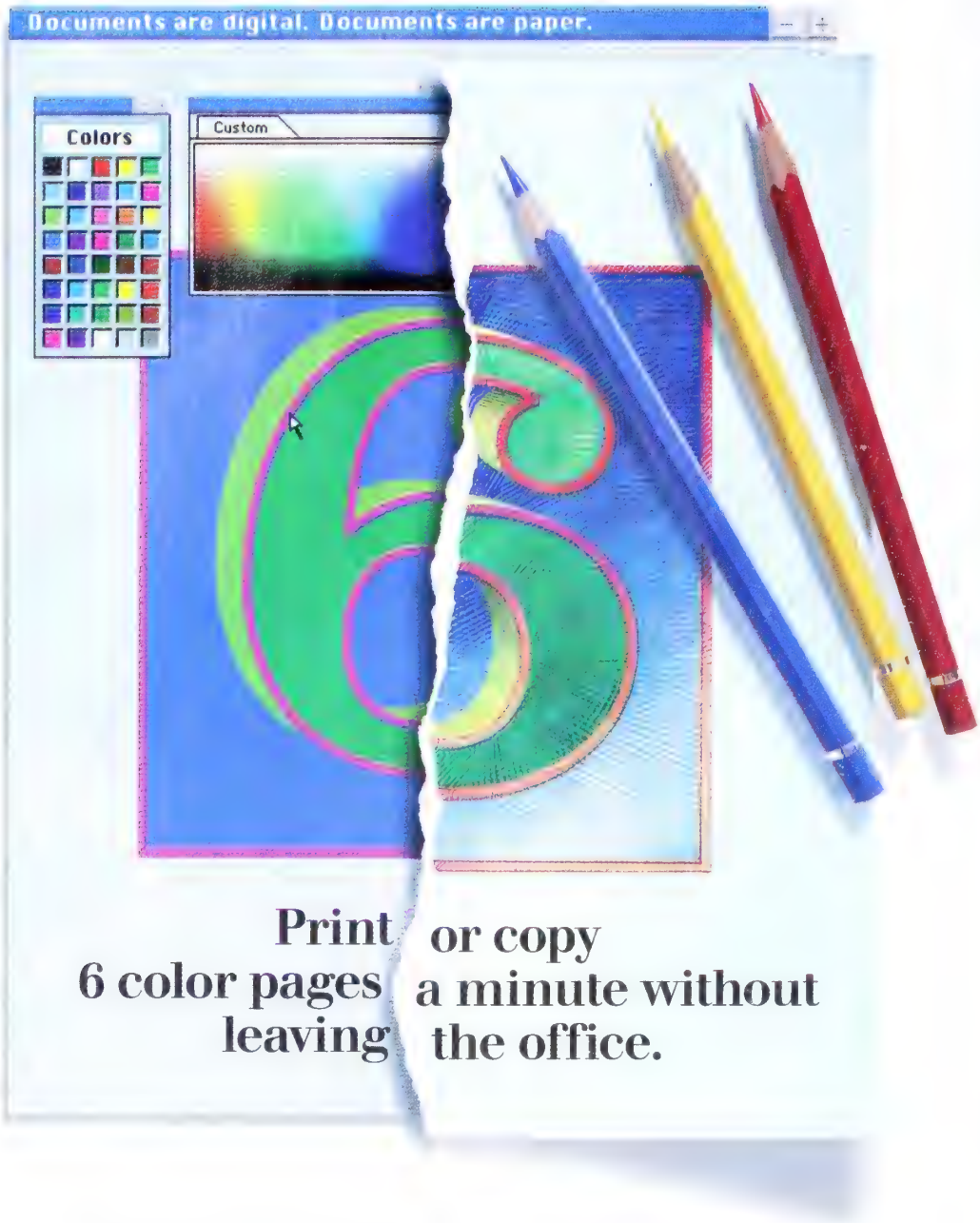

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TED BY JOHN TEMPLEMAN

IDONESIA: FROM ONE GANG F CRONIES TO ANOTHER?

lonesia's B.J. Habibie has been in perpetual motion since e became President on May 21. The German-trained aero- pace engineer's main mission is to renew confidence in In- esia's bludgeoned economy, persuade the International etary Fund to resume payments under the country's billion bailout, and woo foreign investors.

abibie is a big hit among the *pribumi*, or indigenous lim, business leaders. They were cut off from the gravy operated by former President Suharto and his family, preferred ethnic Chinese partners. But ibie is telling the *pribumi* that they'll get a deal in the future. Government officials hint that the billions piled up by Suharto his cronies will be distributed to ordinary *umi* in some way. Habibie also vows to inue a legal probe into the Suharto empire stop lending to presidential cronies.

here are, of course, limits to what Habibie do. Military leaders, notably armed forces mander General Wiranto, could step in and ace him as President if he goes too far.

PLY SKEPTICAL. But as he panders in- singly to *pribumi* interests to bolster his ical position, Habibie may be condemning economic plans to failure. Ethnic Chinese ons, who control about 70% of the economy, their businesses may be confiscated. They already pulled billions of dollars out of the try. "If Chinese money doesn't come back, [Indonesia] has chance" of recovery, says Paul Durham, a Sydney-based aging director of BT Funds Management.

oreign investors are deeply skeptical of Habibie. They that he won't reduce graft but "will just have a fairer ribution of corruption," says one. Adds Robert Rigney, a ier U.S. diplomat in Indonesia: "I wouldn't get into any with Habibie's boys. I'd wait three or four months and what happens." Such judgments are bad news for Habibie. He needs multinationals to unlock the $100 billion in investments that they were planning before Suharto's downfall—otherwise he has little hope of cutting unemployment, which quadrupled in a year, to 16 million.

Multinationals remain ultracautious. Nike Inc. footwear factories are filling orders from a new plant in the Philippines, says an industry source. France's Alcatel was ready to open a fiber-optic cable factory in Jakarta in June. Instead, it covered brand-new machines with tarps, locked the doors, and sent staffers home after phone sales slumped, says Chief Executive Officer Jean-Philippe Benoist.

HABIBIE: *Favoring Muslims*

Habibie's appointments worry foreigners and ethnic Chinese because they're heavily weighted toward the *pribumi*. Aburizal Bakrie, chairman of the Indonesian Chamber of Commerce & Industry and of Bakrie & Brothers, the largest *pribumi* conglomerate, replaced ethnic Chinese tycoon Anthony Salim as chairman of the government's Resilience Council, which is negotiating to restructure about $130 billion in offshore private and official debt. Tanri Abeng, former CEO of Bakrie and local partner of Dutch brewer Heineken, is the powerful State Enterprises Minister.

In another move, Habibie has formed a squad of seven so-called business ambassadors. Armed with diplomatic passports, they rove the world seeking foreign investment. Most are *pribumi* and members of Parliament, likely to vote to keep Habibie as President despite his pledge to leave office by January, 2000. "I hope we can change his mind," says Bakrie.

Now that Suharto's 32-year grip on power finally has been broken, that's the last thing investors want to hear. Besides, the Indonesians who took to the streets to force out Suharto don't want another autocracy of cronies.

By Michael Shari in Jakarta

GLOBAL WRAPUP

E RETURN OF KLAUS?

Czech hard-line free marketeer clav Klaus may be back in office n. The former Prime Minister's vic Democrats came in second in neral elections on June 19-20. But los Zeman, leader of the opposition cial Democrats, which won with 3% of the votes, may be unable to m a viable coalition, as his Pension- ' Party allies didn't win any seats. If Klaus can rebuild his old coalition, could be back in power with a slim, o-seat majority. First, he has to get the Christian Democrats to rejoin him. They forced his ouster six months ago after a string of corruption scandals. Since then, Klaus, architect of the country's postcommunist transformation, has reinvented himself by focusing on big issues and distancing himself from his government's tarnished record.

NEW JEWISH CLAIMS FOR SWISS

► Even after settling Holocaust claims against its banks, Switzerland may face an avalanche of new claims—from Jews denied entry in World War II and persecuted by the Nazis. One refugee, Joseph Spring, has sought $67,000 in government compensation and been refused.

In 1942, Spring, then 16, tried to sneak into Switzerland with two cousins. They were caught, turned over to the Nazis, and sent to Auschwitz. Unlike his relatives, Spring survived and went to Australia, where he's a retiree. On June 23, Finance Minister Kasper Villiger said there were no legal grounds for paying him anything, but "there is perhaps a moral consideration, and he can sue us in the courts." Spring's lawyer said he plans to do just that.

EXECUTIVE SUITE

HOW AL DUNLAP SELF-DESTRUCTED

The inside story of what drove Sunbeam's board to act

On June 9, Sunbeam Chairman and CEO Albert J. Dunlap stormed out of a board meeting in Rockefeller Center, leaving a conference room filled with puzzled and incredulous directors. Most of them thought the once celebrated champion of downsizing, under mounting pressure, was becoming unglued. One director, say three participants, openly expressed concerns about Dunlap's emotional state.

Demanding their support, Dunlap, 60, had just told his board that billionaire financier Ronald O. Perelman and others were engaged in a conspiracy to drive the small-appliance maker's already slumping stock down further so they could buy Sunbeam Corp. on the cheap. He suggested that if Michael Price, an influential mutual-fund manager who had recruited Dunlap nearly two years earlier, really backed him, he would buy out Perelman's $280 million stake.

Why Perelman, one of Sunbeam's largest investors, who owns 14% of the company, would do anything to diminish his investment, he could not explain. "We can't fight a battle on two fronts," said Dunlap, according to several directors. "Either we get the support we should have or [chief financial officer] Russ and I are prepared to go.... Just pay us."

NEAR TEARS. "Al, we don't know what you're talking about," retorted Director William T. Rutter, a banker patched into the meeting by phone from Florida, according to several participants. "We're supportive of both of you."

So were all the other four outside directors. Again and again they assured Dunlap and his close ally, Russell A. Kersh, of their support. Kersh, say several directors, seemed near tears. "I don't know what Al thought or what was going through his head," says Peter A. Langerman, Price's board representative. "But I didn't hear anything from Perelman, and Price was still behind him."

n four days, however, the directors d to fire the man who has made a nomenal business career out of firing rs. Rarely does anyone express joy nother's misfortune, but Dunlap's er elicited unrestrained glee from y quarters. Former employees who been victims of his legendary chain- nearly danced in the streets of natta, La., where Dunlap shuttered a t. Says David M. Friedson, CEO of lmere-Durable Holdings Inc., a com- .or of Sunbeam: "He is the logical eme of an executive who has no es, no honor, no loyalty, and no s. And yet he was held up as a orate god in our culture. It greatly ered me." Other chief executives, y of whom considered him an ex- ist, agreed that Dunlap's demise a welcome relief.

Even members of his own family—long estranged from the man—seemed ebullient. Upon hearing the news of his father's sacking on CNBC at 6:20 a.m. in Seattle, Troy Dunlap chortled. "I laughed like hell," says Dunlap's 35-year-old son and only child. "I'm glad he fell on his ass. I told him Sunbeam would be his Dunkirk." Dunlap's sister, Denise, his only sibling, heard the news from a friend in New Jersey. Her only thought: "He got exactly what he deserved."

Sunbeam's stock, meanwhile, has plummeted from a high of 52 in early March to a low of 8⅛ on June 22, below the level it traded when Sunbeam announced Dunlap's hiring in mid-1996. One analyst, Nicholas P. Heymann of Prudential Securities Inc., said the stock was trading "more on vindictive emotions than rational analysis."

How could a single businessman arouse such emotions? In little more than four years, Al Dunlap made more than $100 million, ran two well-known public corporations, wrote a best-selling, vainglorious autobiography, and axed some 18,000 employees. Dunlap, of course, was hardly the only chieftain to order hefty workforce cuts or to say that the only stakeholders in a public corporation are its investors. But by eagerly seeking publicity to expound his simple philosophy, he emerged as the poster boy for "shareholder wealth." Since his departure from Sunbeam, Dunlap has been uncharacteristically silent. Along with his attorney, Christopher J. Sues, and CFO Kersh, he has not responded to repeated requests to be interviewed for this story.

UNGLUED

Dunlap claimed Perelman was conspiring to lower Sunbeam's value to buy it on the cheap, a theory the board thought was irrational

To investors who made millions by following him, Dunlap was, if not a god, certainly a savior. He parachuted into poorly performing companies and made tough decisions that quickly brought shareholders sizable profits. "We're all seduced by the possibility of big wins," says PaineWebber Inc. analyst Andrew Shore, who follows Sunbeam. After meeting Dunlap in mid-1996, Shore immediately put out a buy on the stock. "I didn't necessarily like him or trust him," he recalls, "but I thought my clients could make money on him. I knew they just had to get out at the right time."

But if Chainsaw Al's rise to prominence was a '90s version of *Barbarians at the Gate*, his sudden demise may signal the beginnings of a more tempered era. With much of Corporate America considerably leaner and labor markets tight, taking a two-by-four to a problem is no longer perceived as a viable solution. "The need to do major downsizing is over. The opportunities to pick that kind of low-hanging fruit aren't as prevalent, and the second picking often requires different skills and methods than a Dunlap is known for," says Edward E. Lawler, a management professor at the University of Southern California. "Clearly, his era has come and is going."

DEMOLITION EXPERT. It was a supremely confident and triumphant Dunlap who arrived at the troubled appliance maker in July, 1996. Six months earlier, he had successfully completed the sale of Scott Paper Co. Wall Street lustily cheered his arrival at the $1.2 billion maker of electric blankets and outdoor grills. Sunbeam's stock surged nearly 50%, to 18¾, the day after his July 18 appointment. Less than four months later, Dunlap lived up to his reputation as a corporate demolition expert. He announced the shutdown or sale of two-thirds of Sunbeam's 18 plants and the elimination of half its 12,000 employees.

Predictably, Wall Street applauded Dunlap's actions, reporters wrote favorably of his exploits, and the stock zoomed up. It traveled so far in that direction, in fact, that it foiled Dunlap's initial strategy to sell the company. Although he hired investment banker Morgan Stanley Dean Witter & Co. to seek a buyer last October, no one would pay that large a premium (the stock had risen by 284% since July, 1996, to over 48). That forced Dunlap to consider another alternative: to scour the market for companies to buy. In early March, Dunlap bought not one but three companies in one fell swoop: Coleman, the camping-gear maker, from Perelman in a stock-and-cash deal; First Alert smoke alarms, and Signature Brands, the maker of Mr. Coffee.

Dunlap's most devoted fans, of course, resided on Wall Street. But Shore of PaineWebber wasn't one of them. Trained by the legendary Perrin Long, who made him come to work by 7 a.m. and labor over weekends, Shore, 37, had been following the household products and cosmetics industries for a decade when Dunlap arrived at Sunbeam.

When the stock spiked when Dunlap

CHAINSAW AL'S WATERLOO

1996 Dunlap is named chair-CEO of Sunbeam. The stock arly 50%, from 12½ to 18⅝.

1996 Dunlap announces plans of Sunbeam's 12,000 employ- lose or sell two-thirds of its 18 uring plants.

1997 Dunlap hires Morgan explore "strategic alternatives," acquisitions or Sunbeam's sale.

1998 Dunlap declares a d, reporting record sales and for 1997.

1998 Dunlap announces a trio tions: camping-gear maker Cole- ke-alarm producer First Alert, offee maker Signature Brands.

1998 Sunbeam stock closes at igh of $52 a share.

1998 Stock falls 25%, to 34⅜, eWebber analyst Andrew Shore wngrade and company shocks t by posting a first-quarter loss.

1998 Dunlap tells investors he ye "off the ball," says that it r happen again."

1998 Dunlap demands board , he says, he and Vice-Chair- CFO Russell Kersh will resign.

1998 Outside directors fire

1998 Board agrees to hire Jerry ongtime aide to financier Ronald , as new chief executive.

DATA: BUSINESS WEEK

was appointed, Shore thought the reaction irrational and said so. His candor hardly pleased Dunlap, who would claim that Shore was biased against him because PaineWebber didn't get Sunbeam's investment banking business. (Shore denies that charge.) Still, the analyst jumped on the bandwagon himself, knowing Chainsaw Al could make his clients money. With each new earnings report, however, he carefully dissected Sunbeam's ever-improving results.

It didn't take long for alarm bells to sound. After the company reported its results in the second quarter of 1997, Shore says he began "getting pangs in my stomach." The numbers showed that Dunlap was building what Shore considered abnormally high inventory levels and accounts receivable. His trade contacts confirmed his suspicions that Sunbeam was giving lucrative terms to dealers to ship products aggressively.

"BILL AND HOLD." "I said to myself: 'Let's play the game a little longer,'" remembers Shore. "No one [had] soured on him yet. Very few picked it up, only the smart shorts at the hedge funds. I thought it would take several more quarters to play out." Shore alerted his clients to the warning signs but continued to recommend the stock because he thought investors would keep bidding it up.

He was right. Sunbeam's shares kept climbing, even though the company's third-quarter results created even greater cause for concern. Shore noted in one of his reports that there were massive increases in sales of electric blankets, usually a fourth-quarter phenomenon. Then, in the fourth quarter of 1997, he was alarmed by enormous increases in sales of grills, at a time when virtually no one buys those products. Still, Shore says, "I didn't think the story was over just yet. The market hadn't caught it."

Although unknown at the time, Dunlap was aggressively trying to push out more and more product. As the company later acknowledged, he began to engage in so-called "bill and hold" deals with retailers in which Sunbeam products were purchased at large discounts and then held at third-party warehouses for delivery later. By booking these sales before the goods were delivered, Dunlap helped boost Sunbeam's revenues by 18% in 1997 alone. In effect, he was shifting sales from future quarters to current ones. The approach was not illegal, but the extraordinary volume made it unusual. Dunlap defended the practice, saying that it was an effort to extend the selling season and better meet surges in demand. Sunbeam's auditors, Arthur Andersen & Co., later insisted it met accounting standards.

On Mar. 19, Sunbeam acknowledged that first-quarter results would be below analysts' estimates. Two weeks later, on Apr. 2, Shore heard more disturbing news: Donald R. Uzzi, Sunbeam's well-regarded executive vice-president for worldwide consumer products, had been fired by Dunlap. Not able to reach Uzzi or Dunlap for confirmation, Shore sought out investor-relations chief Richard Goudis, only to discover that he had quit. Finally, the analyst thought, it was time to advise his clients to get out of the stock. He frantically downgraded the stock on Apr. 3 at 9:00 a.m., and it quickly fell by 4 points. Some two hours later, Sunbeam disclosed that it would post a first-quarter loss. By day's end, the stock fell 25%, to 34¼, and shareholders soon filed lawsuits charging deception, an accusation that Sunbeam dismisses as "meritless."

Undaunted, Dunlap swiftly hatched a plan for a comeback. On May 11, before 200 major investors and Wall Street analysts—including Shore—he promised that the company would rebound from its dismal first-quarter of $44.6 million. Dunlap conceded he had taken his "eye off the ball" focus on the trio of acquisitions he m in March and had allowed underl to offer "stupid, low-margin deals outdoor cooking grills. But he insi that it would "never happen again," that Sunbeam would post earning 5¢ to 10¢ a share in the second q ter and $1 a share for the full y

Not everyone felt reassured, lea all Shore, who had several content exchanges with Dunlap at the mee Afterward, as Shore was heading the door, Dunlap made a beeline him. "I saw this wild man coming ward," recalls Shore. "He grabbed by my left shoulder, put his hand his mouth and near my left ear said: 'You son of a bitch. If you wa come after me, I'll come after you t as hard.'" One Sunbeam adviser roborates Shore's account.

Dunlap's performance at that m ing—including his announcement of other 5,100 layoffs at Sunbeam and newly acquired companies—didn't vent the stock from dropping furt

THE LONG KNIVES AT SUNBEAM Dunlap's strange

KRISTOL: *Took Dunlap's ultimatum to mean "that Al and Russ want out"*

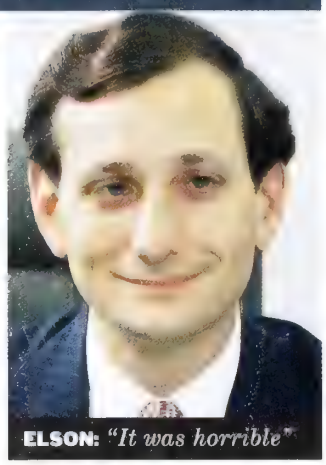
did Dunlap's speech stop news re- about what Shore had discovered y nine months earlier: that Sun- was engaged in highly aggressive tactics and accounting practices inflated revenues and profits. The scathing analysis, in *Barron's*, al- that Dunlap employed $120 million rtificial profit boosters" last year the company reported $109.4 mil- n net income.

nlap was so concerned about the s of the story that he called an to deal with the story, from the filing of a libel suit to issuing a detailed letter of corrections to its shareholders.

The discussion was drifting when it was decided simply to draft a point-by-point rebuttal for the company's bankers and directors. Suddenly, Director Charles M. Elson, a Stetson University law professor and friend of Dunlap's, asked how the company's second quarter was shaping up. The following exchange then occurred, according to four of those who were present.

directors off that something was amiss

AN: *Delivered the coup de grâce*



ELSON: *"It was horrible"*

WHITTLESEY: *Worried*

omptu board meeting for June 9 but the charges. He arrived for session at 4 p.m. Besides the five de board members, there was a of external advisers, including ers, public relations consultants, the company's accountant from ur Andersen. Dunlap, recalls one cipant, "seemed strangely subdued quiet."

rsh and Controller Robert J. Gluck he board through the charges, ing virtually all of them. The ur Andersen partner assured the l that the company's 1997 numbers in compliance with accounting lards and firmly stood by the firm's of Sunbeam's books. The direc- discussed a range of alternatives

"Sales are a little soft," said Kersh.

"Well, do you think you're going to make the numbers?" asked Elson.

"It's going to be tough," replied Kersh.

"This is a transition year," Dunlap responded. "You've got to stop worrying about specific numbers. We're trying to prepare for 1999."

Dunlap then said he wanted to discuss something privately with the board. All the outside advisers departed, leaving only Dunlap, Kersh, and the five directors. Over the next 20 minutes, Dunlap told the board that either he needed the right level of support or he was prepared to go.

"If you really want me and Russ to go, then let's settle up the contract and we'll go," Dunlap said, according to several board members. "I have a document in my briefcase that we can go over and get it done."

The board was stunned. Dunlap told them he believed that Perelman was orchestrating a torrent of bad media coverage so he could buy the company at a bargain. Some of the directors said later that they thought Dunlap was becoming emotionally distraught. They did not believe that Perelman, who declined comment, would undermine himself that way. His ownership stake enabled him to affect change more directly.

SUSPICIONS. Shortly after the exchange, Dunlap and Kersh got up and marched out of the room. After allowing the pair enough time to reach the elevator bank, Howard G. Kristol broke the silence. Of all of them, he had known Dunlap the longest. For more than 20 years, Kristol had been his personal attorney. He had drafted Dunlap's employment pacts at Scott Paper and Sunbeam.

"That is complete bullshit," Kristol blurted out, according to several directors. "Just bullshit."

Everyone in the room agreed. No one had uttered any doubt about Dunlap's ability to lead the company. No one thought he had cooked the books. So why would he bring up the possibility of resigning?

"I don't know about you, but what I'm clearly hearing is that Al and Russ want out," Kristol recalls saying. The others concurred. The timing could not have been worse. Although the company was in crisis, Dunlap was about to go to London to give a speech and promote his book, while Kersh was going off on vacation in Ohio. They were concerned that Dunlap lacked the resolve to continue in the job, was unaware of the deteriorating results, or worst of all, was being less than candid. "We all sat there feeling like we were going to throw up," says Elson. "It was horrible."

Dunlap's strange behavior led director Faith Whittlesey to openly suggest that perhaps the CEO was suffering from emotional distress, say three directors. She was not the first to wonder if he had lost perspective in the wake of the barrage of hostile media coverage. Some of his closest associates thought he had become oddly subdued and introspective—quite a departure from the volatile and voluble man they knew.

Before leaving the conference room, the directors exchanged personal phone numbers so they could stay in close touch. Several, particularly Langerman, agreed to dig more deeply into the company and question other Sunbeam executives over the next few days. When the session finally broke up around 8 p.m., Elson was so distraught that

12
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he spent the next three hours wandering the streets of Manhattan.

Over the following two days, Langerman did considerable homework. Unbeknownst to Dunlap, he called several Sunbeam insiders, including three top operating executives, Lee Griffith, Frank J. Feraco, and Franz Schmid. But the most important break came when he spoke with Sunbeam's Executive Vice-President David C. Fannin.

FANNIN: *"Totally disillusioned."*

Fannin, 52, didn't fit the Dunlap mold. Unlike his tempestuous, self-promoting boss, Fannin is unassuming and mild-mannered. The Kentucky-born lawyer had worked at a blue-chip law firm in Louisville for nearly 20 years when a client recruited him to Sunbeam in 1993 as interim general counsel. Of Sunbeam's top dozen senior executives, he would be the only survivor, someone who viewed himself as a moderating influence on his mercurial boss.

ALARM BELLS

Analyst Andrew Shore noted oddly high sales of electric blankets in the summer months and outdoor grills in the winter

SHORE: *On Apr. 3, he downgraded Sunbeam stock*

IN CRISIS. Dunlap not only brought Fannin into his inner circle, he handsomely rewarded the lawyer for his loyalty and commitment. In February, for example, Dunlap handed him a new three-year contract that raised his base salary by 90%, to $595,000, along with a huge stock option grant on 750,000 shares, now underwater. What Dunlap failed to notice, however, was that Fannin had become demoralized by what he saw at Sunbeam. It was hard to really like Dunlap, with his hair-trigger temper. Many times Fannin considered quitting. "But it was like being in an abusive relationship," he says. "You just didn't know how to get out of it."

Fannin, however, had now reached the breaking point. Although Kersh told the board the second quarter would be soft, a week earlier Fannin had been at a Sunbeam meeting at which considerable concern was raised that the results would be far below Dunlap's May 11th forecast. At that session, the numbers coming in showed that revenues were falling by as much as $60 million in the quarter. In last year's second quarter, Sunbeam's sales were $287.6 million.

When Langerman called Fannin on Wednesday morning at his office, Fannin was ready to reveal what he knew. "I was totally disillusioned," he said. "I felt this was not something I wanted to be involved in any further." Later that night, while at home, he told Langerman that the numbers were much worse than soft, and that the company was in crisis.

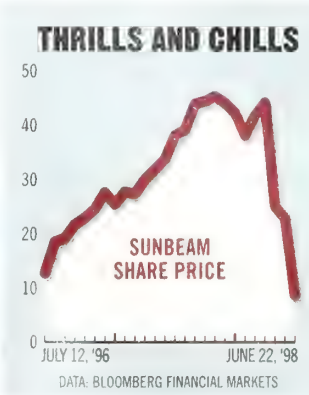
Meanwhile, Fannin did some interviewing of his own from Wednesday to Friday of that week. He met with Gluck, the controller, a finance analyst who had been a pre-Dunlap holdover, and asked pointed questions about the quality of the 1997 earnings. "I didn't like the answers I got," recalls Fannin. "He said: 'Look, as much as possible, we tried to do things in accordance with GAAP, (generally accepted accounting principles), but everything has been pushed to the limit.' There was no smoking g but taken as a whole, this was nc sustainable situation." Gluck did not spond to requests to be interviewed

Langerman called his fellow direc and asked them to come to an en gency meeting in Kristol's Rockefe Center offices on Saturday morn Fannin agreed to come to report what he had found. "Had he not c forward," says Elson, "it would h been extraordinarily difficult for u act. He was the quiet hero. He re put his neck out."

On Saturday morning, June 13, S beam's outside directors solemnly g ered around the same rectangular ference room table where only four earlier they had had their odd mee with Dunlap and Kersh. A box of Kr Kreme doughnuts served as breaki Four of the directors were there, al with Fannin and a pair of lawyers f Skadden Arps, Slate, Meagher & Fl Director Rutter was on the teleph from Captiva Island, Fla., where he on vacation with his family.

The directors all agreed Dunlap to go. With the exception of Lan man, the directors were Dunl friends. But they also felt betra by him, misled about the company' nancial condition, its second-qua earnings, and its yearly numbers well, they later said. "We lost our fidence in him and the ability to sus

THRILLS AND CHILLS



DATA: BLOOMBERG FINANCIAL MARKETS

gs was questionable," says Rutter. y noon, Skadden Arps lawyer ne V. "Finn" Fogg carefully script- he words that Langerman would to Dunlap when they placed the erence call. "All the outside direc- have considered the options you ented to us last Tuesday and have ded that your departure from the pany is necessary," Langerman aloud.

lson then made the motion to dump lap, but he couldn't bring himself ad it. "It felt too cruel," he recalls. had gone back a long way, and I couldn't do it."

after Elson put forth the motion, as quickly seconded by Kristol and y read by Fannin. The outside di- rs passed it unanimously.

EXPLANATION. "I think I'm entitled n explanation," Dunlap said finally, rding to several participants in the ting.

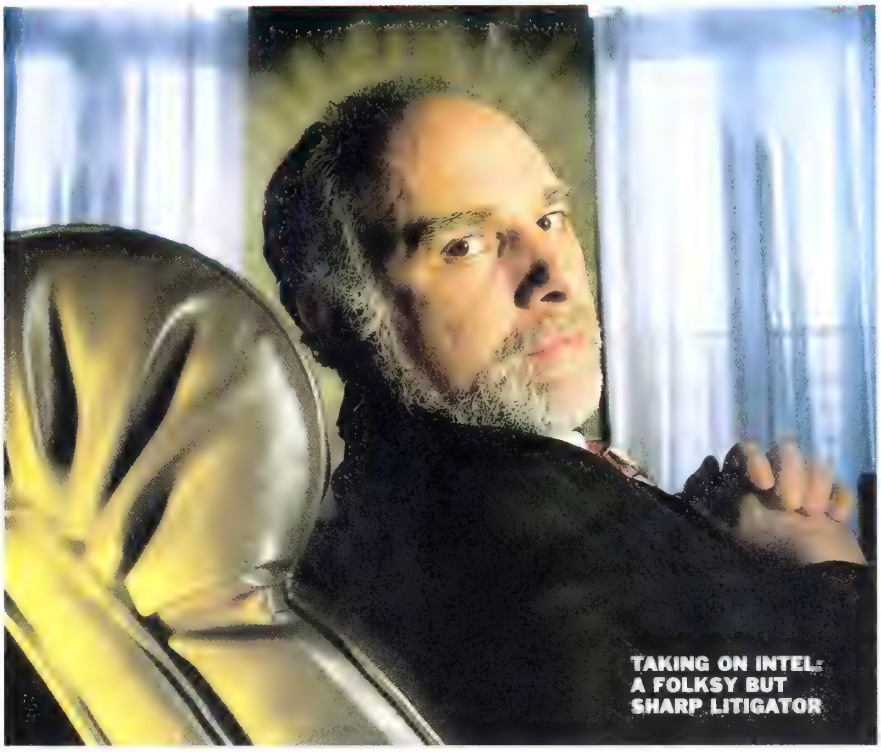
e wouldn't get one. Instead, german told him to contact the d's lawyer. Kristol adjourned the ting shortly after. Three days later, ng a telephone session, Kersh was as well.

he day after Dunlap was axed, the d met again in Skadden Arps' of- . It named as the new chief execu- Jerry W. Levin, a longtime aide to lman and former CEO of Coleman, h now comprises about 40% of Sun- n's revenues. Langerman, who ed to serve as nonexecutive chair- , had called Perelman on Saturday noon to ask for help. Levin was on way to see a movie that evening n Perelman asked if he would be ested in taking over.

ow, Levin has to sort out the mess. only is Sunbeam expected to report her loss in the second quarter and ibly for the year, but the company is under an informal probe by the Se- ies & Exchange Commission. It is expected to be in technical default . $1.7 billion bank loan by June 30. ady, Levin is expected to win a re- ve from the banks, but it will take e time to turn Sunbeam around.

unlap still has followers who pre- a comeback, though headhunters it's unlikely he'll ever get another ice to run a major company. In the Al Dunlap, the kid from Hoboken, , the son of a union steward, fell on own weapon, the sword of share- er value. "Dunlap got thrown out because the board said his way was wrong way to run a company," notes er D. Cappelli, chairman of the rton School's management depart- t. "He was fired because he couldn't e his own numbers."

By John A. Byrne in New York



TAKING ON INTEL: A FOLKSY BUT SHARP LITIGATOR

REGULATORS

THE FTC'S EAGER SHERIFF

William Baer keeps broadening the antitrust "wanted" list

A year ago, legal experts were ready to dismiss William J. Baer as the Don Quixote of the antitrust world. The Federal Trade Commission's chief trustbuster was pursuing a seemingly hopeless case to block Staples Inc. and Office Depot Inc. from merging. His aim? To prevent the creation of a merged company that would control a mere 5% of the general market for office supplies—too little, it seemed, to give the company any power to raise prices.

Baer presented a surprising case, though. He argued that superstores such as Staples and Office Depot competed only among themselves, not with the vast sea of other stationery shops. In the discrete realm of megastores, Baer maintained, the merged company would be dominant. U.S. District Judge Thomas Hogan agreed, issuing a preliminary injunction to halt the consolidation. Ultimately, the companies called off their marriage.

Now, the director of the FTC's Bureau of Competition has embarked on an even more ambitious crusade that has antitrust lawyers again predicting failure. On June 8, the FTC accused Intel Corp. of using its dominance in the microprocessor market to kill rivals. To detractors, Baer is pushing a weak case and is merely vying for attention with his Justice Dept. counterpart, Joel I. Klein, whose suit against Microsoft Corp. has grabbed headlines. Nonsense, Baer counters: "We're only going to get points if we do the right thing. The notion that we are doing something that is not sound is silly."

AGGRESSIVE. In fact, the 48-year-old regulator's track record is deadly serious as far as Corporate America is concerned. Since becoming the commission's No. 1 trustbuster in 1995, Baer and his mentor, FTC Chairman Robert Pitofsky, have presided over easily the most aggressive antitrust activity in 25 years. In just the first five months of 1998, Baer opposed 20 mergers, compared

with an average of 22 a year in the early 1990s. He has taken the unprecedented step of requiring companies to make big divestitures up front to win approval for some mergers. And he has fined companies that don't turn in key documents early.

Is the FTC pushing the limits of traditional antitrust theory? Baer says his approach—and that of occasional tennis partner Klein—is actually quite centrist. Their views fall between the big-is-bad regulatory zeal of the Nixon years and the hands-off ideology of the Reagan era. "Most business conduct will not run afoul of enforcement. But we're here to make sure markets work competitively," Baer says.

Like most of his predecessors at the Bureau of Competition, Baer has played both sides of the street. After graduating from Stanford University Law School in 1975, Baer spent five years as the FTC's lobbyist with Congress. Lawmakers had cut off funding for the commission because it was considered too anti-business. But Baer persuaded Congress that the agency should be kept open because it worked to promote lower prices and consumer choice.

NOT SO FRIENDLY. In 1980, he left for Washington's blue-chip Arnold & Porter. He made his name there as a member of the team that successfully defended General Electric Co. against Justice charges that it conspired with South Africa's De Beers Consolidated Mines Ltd. to fix prices for industrial diamonds. The 1994 verdict was one of Justice's most embarrassing defeats. Jeffrey B. Kindler, GE's vice-president for litigation at the time, recalls how Baer destroyed a prosecution witness. "He comes across as friendly and folksy, with his tie askew," says Kindler, now general counsel at McDonald's Corp. "Next thing you know, he's eviscerated you."

Baer may be known for his laid-back style, but it was his sharp-edged skill as a litigator that prompted Pitofsky to tap him for the competition bureau. The chairman—who worked with Baer at the FTC in the '70s and at Arnold & Porter in the '80s—depends on his protégé to set trial strategy. Litigation "was the area where the government has fallen short," says Pitofsky. "Bill has not just won cases for us but has developed a cadre of lawyers who know the inside of a courtroom."

Baer watchers say he is as public-relations savvy as he is legally skilled, taking special care to simplify complex arguments for public consumption. But Intel officials say he crossed the line in their case. Company execs are angry about a background paper that explains the legal underpinnings of the FTC's case, which Baer sent to antitrust experts who were asking him for information. Intel says Baer breached confidentiality by including points the company made to him during private talks. Baer says none of Intel's arguments included in the paper was secret. "It is part of my job to explain the agency's position," Baer says.

For all his professed moderation, though, Baer has often gone out on legal limbs. In a 1996 action against Toys 'R' Us Inc., the FTC argued that the retailer improperly muscled toymakers not to sell popular items to discount warehouses. But Toys only had a 30% market share—not enough, under traditional antitrust analysis, to give it the power to bully business partners. Baer got around this theoretical problem by ... cumulating evidence th... though the retailer only co... trolled a small portion of the t... market, it still had enough po... er to dictate terms to manuf... turers. If Baer prevails in t... case, trustbusters for the fi... time will be able to bring pre... tory-conduct suits against co... panies with less than the st... dard 80% market share. "Th... would truly have major impac... says George Mason Univers... School of Law professor Willi... E. Kovacic. Last September, ... administrative law judge uph... the FTC charges, and the c... is on appeal.

ANTI-INNOVATION? Baer is a... trying to adapt antitrust law... the world of high-technology ... dustries. In the Intel suit, B... claims the chipmaker used ... dominant power to punish c... tomers that sued the compa... over patent infringements. Si... action sends a chilling signal... innovators who may come ... with patents that Intel wo... want, he says. An innovator, he argu... may stop developing a product beca... of the prospect of having to share it w... Intel. The company responds that ... cause the companies it hurt were c... tomers, not competitors, there's no v... consumers could be hurt.

Another controversial Baer rule: ... requirement that companies find b... ers for divested holdings before gett... merger approval. In the past, merg... companies that agreed to divest u... could put off a sale for years. Howe...

Baer has gone out on legal limbs, arguing that companies with relatively low market share ca... wield undue power under certain conditions

companies gripe that this edict me... they have to sell assets at fire-s... prices. "It's not appropriate for a pu... agency to say, 'We'll shoot you in the ... unless you do what we want,'" s... Washington antitrust attorney Joe Si...

Companies that don't like Ba... push-the-envelope approach had be... get used to it. Baer has good con... tions with confidants of Al Gore. Sh... Gore capture the White House, ... Baer could be testing the limits of a... trust theory well into the next cent...

By Susan B. Garl... in Washing...

BOLD ENFORCER

The head of the FTC's Competition Bureau has a history of pushing the edges of antitrust. His major cases:

INTEL Baer, as main architect of the recently filed suit, wants to force Intel to share information about its patented chips with rivals, a move the company believes violates its intellectual property rights.

STAPLES/OFFICE DEPOT Even though the merged company would have controlled only 5% of office supply sales—ordinarily not enough to trigger antitrust scrutiny—Baer feared it would dominate the superstore category. In June, 1996, he won a court order stopping the deal.

TOYS 'R' US In September, a federal judge upheld a Baer complaint charging the company with blocking toymakers from selling to discount warehouses. Because Toys 'R' Us has only 30% of the top toymakers' sales, not enough to generally give a company significant market power, the ruling surprised experts.

CIBA-GEIGY/SANDOZ Baer blocked the merger of the two Swiss pharmaceutical giants until they took the unusual step of licensing key patents for gene therapy to another company.

DATA: BUSINESS WEEK

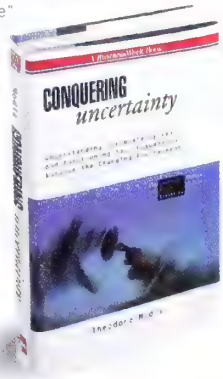
THE Reader's PAGE.

BusinessWeek Books

CONQUERING UNCERTAINTY

by Theodore Modis

Writer/consultant/scientist Modis uses scientific theory to illuminate chronic business problems. He seeks new solutions by seeing the "big picture" in terms of "cycles" and making decisions based on the business "season." (McGraw-Hill)



Pub. Price: $19.95
Discount 30%
B&N Price $13.96

THE MARKET MAKERS
HOW LEADING COMPANIES CREATE AND WIN MARKETS

by Daniel F. Spulber

Home court is always an advantage. But in business, you're usually playing on someone else's court or in someone else's market. In *The Market Makers*, Daniel F. Spulber argues that the way to succeed in business is to create your own market, and he uses the success of Boeing, Citicorp, and Blockbuster video, among others to support his thesis. (McGraw-Hill)

Pub. Price: $24.95
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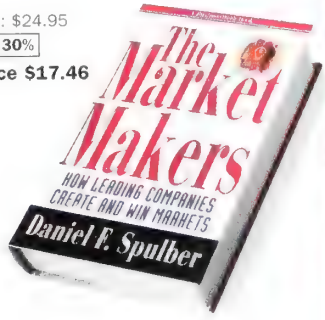
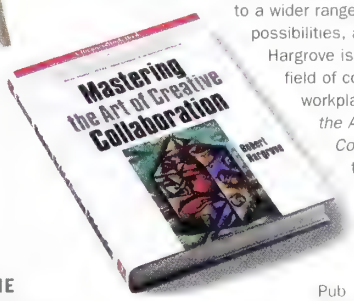


MASTERING THE ART OF CREATIVE COLLABORATION

by Robert Hargrove

It's all about teamwork. When companies tap the varied talents of their people, they open the floor to a wider range of ideas, possibilities, and profits. Robert Hargrove is a leader in the field of collaboration in the workplace, and *Mastering the Art of Creative Collaboration* will transform the way you conduct business. (McGraw-Hill)



Pub. Price: $24.95
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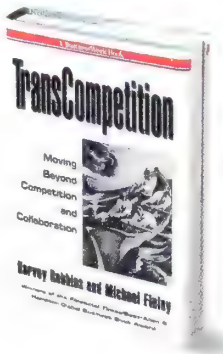
TRANSCOMPETITION
MOVING BEYOND COMPETITION AND COLLABORATION

by Harvey Robbins and Michael Finley

What better benefits business: fierce competition or warm-hearted teamwork? Harvey Robbins and Michael Finley say that neither works as well as transcompetition, which combines the best battle plans with the upbeat spirit of collaboration, resulting in profitable business strategies that slim the competition while expanding the market. (McGraw-Hill)



Pub. Price: $24.95
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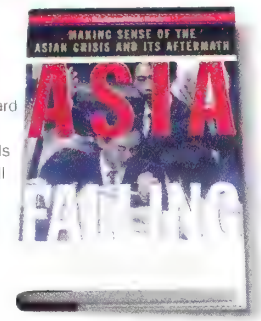
ASIA FALLING
MAKING SENSE OF THE ASIAN CRISIS AND ITS AFTERMATH

by Callum Henderson

In the 1980s, it seemed Asia's financial star would just keep rising. But after the recent crash heard around the world, it appears that the star that burns twice as bright burns half as long. Callum Henderson, Standard & Poor's authority on the Asian currency market, tells investors how they can still turn a profit and make on-target financial forecasts in Asian markets. (McGraw-Hill)



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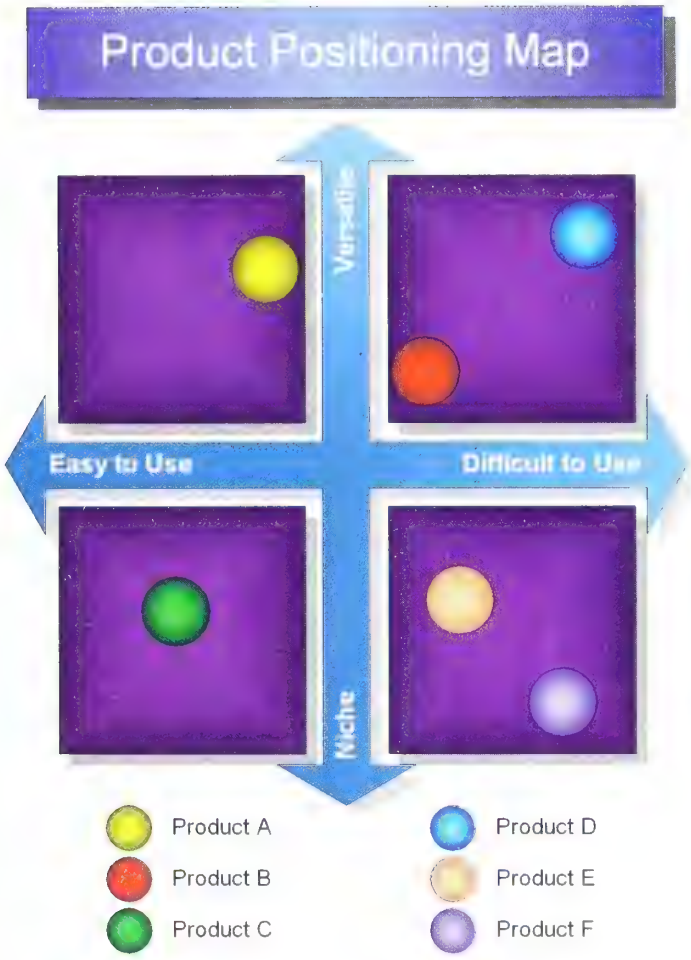

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STOCK MARKET

A REPORT CARD ON 'INSIDE WALL STREET'

On average, the stocks highlighted in the column last year have outperformed the mark

How good is BUSINESS WEEK's Inside Wall Street column? Do the stocks it highlights outperform the market? If so, by how much, and for how long? To answer these questions, BUSINESS WEEK has undertaken an analysis of the stocks mentioned in the column during the year 1997.

What is the purpose of Inside Wall Street? To report the latest information and market talk—usually not yet widely known—that could affect the fortunes of companies and, therefore, the price of their stocks. Sometimes this information is about early discussions of possible mergers or takeovers. Sometimes it's about new products. Sometimes it's about corporate developments, such as restructurings, spin-offs, and asset sales. This information can come from investors, money managers, analysts, or executives themselves. It's in this sense that Inside Wall Street is "inside."

The column has performed pretty well indeed, according to an analysis of the 172 stocks featured in 1997. On average, the picks have measured up favorably against the market's main yardsticks: the Standard & Poor's 500-stock index, the Dow Jones industrial average, and the Russell 3000. BUSINESS WEEK compared Inside Wall Street's picks with those indexes over one day, one month, three months, and six months.

Each issue of BUSINESS WEEK is available online on Thursday evening and begins to reach subscribers and newsstands starting on Friday. So we measured the column's impact on stocks starting from Thursday's closing prices. The advantage is most pronounced in the short term (table). The one-day impact, on average, comes to a gain of 4.7%. Of the 172 stocks, 139 produced a gain on Friday, 101 were ahead after one month, 103 after three months, and 104 after six months.

The strong impact on Friday reflects to some degree the "announcement effect." For example, when a well-known analyst recommends a stock, it of rises immediately. If the views of widely followed market forecaster investor become known, there is an mediate impact. When Warren Buff for instance, let it known on Feb that he had bou 111.2 million our of silver in 19

Inside Wall Street

BY GENE G. MARCIAL

MELLON MAY BE RIPE FOR PICKING

Unlikely or not, there's a new name on the short list of takeover targets: Mellon Bank (MEL), the 22nd-largest U.S. bank holding company. Suitors, say the takeover pros, include NationsBank, Chase Manhattan, First Union, Northern Trust, and Bank of New York. "The talking point in terms of price is 55 a share," says one shareholder, but he thinks Mellon will consider no offer less than 60. Mellon stock hit 45¼ on June 13 and is hovering at that level.

When Mellon Bank acquired Dreyfus in August, 1994, it set itself apart from most other banks. It became the No. 1 bank manager of mutual funds and one of the largest investment-management firms, with $238 billion in managed assets. "It's not just a bank anymore."

BIOMATRIX WALTZES WITH THE BIGGIES

For a company with a market cap of just $185 million, Biomatrix (BMXI) can also claim a sort of big-cap appeal: It has signed potentially huge contracts with some big names in pharmaceuticals, including American Home Products, Rhône-Poulenc Rorer, Collagen and Hoffmann-La Roche. What do they want little-known Biomatrix for?

Biomatrix has two patented proprietary products: Synvisc, a device for osteoarthritis of the knee, and Laform, used to correct skin wrinkles and scars. American Home Pro through its Wyeth-Ayerst Lab ries division, has paid Biomat million for the right to marke visc in Austria, Germany, Gree tugal, Spain, and certain coun Central Europe and the Middes the product is approved by th Drug Administration.

Inside Wall Street

BY GENE G. MARCIAL

THE NEW WISDOM ON SALOMON

Two months ago, the takeover pros lamented: "Salomon isn't for sale." Maybe then—but no longer.

In recent days, the global securities company "has been elevated to the top of the list of buyout targets," says a New York investment banker who claims to know about a "fresh expression of interest" by a U.S. commercial bank.

Indeed, shares of Salomon rose to 60¾ on July 30, up from 55 a few days before. That's close to Salomon's 52-week high of 61¾ in February. The stock has been a laggard all year, trailing the overall market and other brokerage stocks.

There is more that one set of eyes on Salomon: A Swiss bank is also looking, according to the investment strategist at one Wall Street bank. A representative

MICRO-CAPS THAT LOOK LIKE WINNER

How risky are the so-called mi cap stocks? "Very," admits Aud Jones of Morgan Grenfell Capital M agement, who warns they may be h zardous to your portfolio. But for savvy stock picker, she says, they "where undiscovered shares with tentially huge returns are to be foun

To find winners, Jones sifts throug 4,000 stocks with market capitaliza tions between $10 million and $500 mi lion. Her Morgan Grenfell micro-ca fund has outscored the Russell 2000, a index of small-caps. Through July 2 this year, Jones's fund posted a retur of 15.2%, vs. Russell's 12.7%.

For 1997, the column produced some sparkling winners–as well as some crushing losers

the metal's price shot up. The better the recor the forecaster, the greater the nouncement effect.

For the stocks featured in the umn, the announcement effect often at the opening on Friday. Traders e their orders before the opening, a there are lots of buy orders, the cialists or market makers will open stock at a level above the Thur close. Sometimes, the price goes hi during the day, but in general, ma the gains from the announcement e show up early in the trading day.

er time, the fundamentals as-
hemselves. If they're sound,
he stock may continue to rise
ce well after the recommen-
n becomes public knowledge.
times, the forecast is off the
No one will dispute that Buf-
s an astute investor. But the
of silver, after surging initial-
l because of oversupply and
ening demand.

IOVERS. In the case of stocks
side Wall Street, the data
that the gain for the aver-
stock continues—but at a
ly reduced rate. After one
n, the picks had gained an av-
of 5.4%. That handily beat
.9% gain by the S&P 500, the 1.7%
ired by the Russell 3000, and the
s 1.3%. The column's stocks also
ved decent returns vs. the indexes
the three-month and six-month pe-
The column's picks posted a gain
8% in the three-month period,
oring the S&P's 7%, the Russell's
and the Dow's 5.2%. And over six
months, the column's stocks ad-
vanced 15.1%, a bit be-
hind the S&P's 15.4%, but
ahead of the Russell's
14.8%, and the Dow's
11.6%.

But averages are
that. The column has produced
sparkling winners as well as
ning losers—and those can affect
average. So we also examined the
an return, which softens the im-
of those big movers. Of the col-

How the Column Stacks Up

Inside Wall Street featured 172 stocks in 50 issues in 1997. For each issue, the returns for the market benchmarks were calculated for each of four time periods. Those returns were then averaged over all 50 issues, and the results are below. The average return for the column was figured the same way.

	GAIN FOR 1 DAY	1 MONTH	3 MONTHS	6 MONTHS
S&P 500	0.1%	1.9%	7.0%	15.4%
RUSSELL 3000	.05	1.7	6.7	14.8
DOW JONES IND.	.03	1.3	5.2	11.6
INSIDE WALL ST.	4.7	5.4	7.8	15.1

DATA BUSINESS WEEK, STANDARD & POOR'S CORP

umn's 172 stocks, the median return for the six-month period was 9%, a good deal less than the average return of 15.1%. That means half the stocks had returns in excess of 9%, and half were below. The median returns for the shorter periods varied: 3.2% for the first day, 2.4% for the first month, and 6.7% for the three-month period.

But such a gap between average and median returns is found in the performance of most portfolios. For instance, if you give equal weight to all the stocks in the S&P 500, the year-to-date return would be an average of 8.9%, compared with 13.9% for the capitalization-weighted S&P 500 (through June 19). And equal weights were used in measuring the performance of the Inside Wall Street stocks. But even the 8.9% is influenced by some of the bigger winners. The median return for the equal-weight S&P is just 6.7%.

Takeovers provided a big slice of the column's spice in 1997. More often than not, however, stocks mentioned as takeover targets do not get taken over. That is to be expected. Suitors looking for companies—or investment bankers trying to do deals—talk to many prospective targets before a match can become a reality. For example, Sanford Weill talked to Goldman Sachs and several other big companies before his Travelers Group zeroed in on Citicorp.

The job of the column is to report the news that company X is talking to company Y or that investment bank Z is trying to get companies X and Y together. The column also reports which "takeover suspects" are being bought by big players. Regardless of the outcome, stocks of these targets start to move as they begin to build up takeover premiums.

Mellon Bank, for example, was tagged as a takeover target in the issue of June 30, 1997. Among the suitors mentioned was Bank of New York. Mellon was then selling at 46. Six months later, the stock had risen to 60, even though no deal had materialized. (This year, Bank of New York made a hostile bid at 87 a share, which Mellon rejected. The stock traded on June 24 at 70⅝.)

DARK HORSE. Sometimes, the successful suitor turns out not to be the one identified in the column. Take Salomon Brothers. It was trading at 63 when highlighted in the column as a target in the issue of Aug. 11, 1997. The likely suitor mentioned was a major New York bank. On Sept. 24, 1997, Salomon agreed to be acquired—but by Travelers—for $9 billion in stock, or about 78 per share at the time. By Nov. 26, 1997, the last day that it traded, Salomon stock closed at 83¾.

Also featured as a takeover bet was USLife: It agreed to be acquired by American General for $2.4 billion on Feb. 13, 1997—about a month after USLife was discussed as a target in Inside Wall Street in the issue of Jan. 20, 1997. The stock was trading then at 34⅜; it rose a tiny 0.4% on the first day, and climbed 17.9% after a month, 30.5% in three months, and 51.6% by the time it stopped trading on June 17, 1997.

In some cases, companies highlighted in the column as takeover targets failed to end up in a deal during the six-month period. But a number of them did find themselves being taken over after that. One of them was Mercantile Stores, featured in the issue of July 7, 1997, when the stock was at 56 a share. The column reported that Federated Department Stores had been rebuffed earlier in its informal bid at 75 a share but that it might come back with an offer of 80 to 90 a share. Rumors persisted, but nothing happened—until May 18, 1998, when Dillard's Department Stores, another chain, made a bid to acquire Mercantile for $3.14 billion, or 80 a share.

Some of the column's biggest win-

When was the last time you shot the breeze?

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ners weren't even involved in takeovers. For instance, Premisys Communications was highlighted in the issue of Apr. 14, 1997. Inside Wall Street reported that technology guru Michael Murphy saw Premisys, then trading at 8⅝ a share, as a "screaming buy." In six months, it had soared 177.5%. An even bigger performer was EarthLink Network, whose stock, trading at 13½ when mentioned in the column on Sept. 8, 1997, jumped 38% in one month, 41.7% in three months, and 263% after six months. Other big winners over the longer term: Protection One, up 90.8% after six months; Egghead.com, 91.7% in six months; Gencor Industries, 187% after six; and Lernout & Hauspie Speech Products, up 212.7%.

DELISTED. Inside Wall Street also featured some stocks that turned out to be big losers: The column of Jan. 13, 1997, reported that Jeffrey Logsdon of Cruttenden Roth, an investment firm in Irvine, Calif., was predicting that Graphix Zone, then selling at 3, would become one of the largest music Web sites on the Internet. That didn't happen. Instead, the company remained in the red and got delisted from the NASDAQ. The stock had gained 16.7% in one day, dropped 12.5% in a month, had fallen 58.3% in three months, and at the end of six months was down a staggering 88.3%.

Other big losers: CardioThoracic Systems, which fell 1.2% after one day, gained 7.5% in a month, lost 17.9% after three months, and fell 42.2% after six; Pacific Chemical Group, which gained 2.4% in one day but lost 26.7% in three months and dropped 44.8% in six months; and American Pad & Paper, which gained 3.8% after the first day but fell 5.2% in month, 35.1% in th months, and 47.4% six months. All t about 40% of stocks featured in column had nega returns from the month on.

Inside Wall St has sometimes char its position on a s if it felt its source been wrong on fundamentals. Buy, a specialty re er of consumer e tronics, was featu in the column firs a short in June later in October buy. The column ported in the June 1997, issue that Olstein, chairma the Olstein Finan Alert Fund, shorting the stock. though other bu stock picks of Olst worked out well, short-sale recomm dation on Best was a disaster. Ind of the column's picks for short only one was be the base price a six months (ta page 76). Best for example, winging up: Tradin 6⅝ a share (adju for a split) on Jun it fell 5% in one but by Oct. 10, stock had run up than 100.5%. It then that Will Harnisch, presider Forstmann-Leff A ciates, made a convincing argument despite the huge runup, the stock w buy. Six months later, the stock rocketed 191.7%.

BUSINESS WEEK intends to eval the column's performance on a regu basis. Stay tuned.

By Gene G. Marcial, with statis assistance from Jeffrey M. Lader Fred Katzenberg, Michael J. Mal and B. Kite

Gene Marcial's Inside Wall Street colum not running in this issue, but his co will be back next week.

The Best Performers...

FOR ONE DAY	
CARTER-WALLACE	28.3%
ADVEST GROUP	28.3
OPTA FOOD INGREDIENTS	21.0
FOR ONE MONTH	
LERNOUT & HAUSPIE	77.3
JACKSON HEWITT	56.0
FAMILY GOLF	54.5
FOR THREE MONTHS	
BIOMATRIX	122.1
ADVANCED HEALTH	71.6
PREMISYS COMM.	70.4
FOR SIX MONTHS	
EARTHLINK NETWORK	263.0
LERNOUT & HAUSPIE	212.7
BEST BUY*	191.7

...And The Worst

FOR ONE DAY	
EXIDE	–7.1%
SANMINA	–5.9
DANIELSON HOLDING	–5.1
FOR ONE MONTH	
PACIFIC CHEMICAL GROUP	–26.7
BROOKSTONE	–20.7
LARSON-DAVIS	–20.4
FOR THREE MONTHS	
BEST BUY**	–91.6
COOPER CAMERON	–63.2
GRAPHIX ZONE	–58.3
FOR SIX MONTHS	
BEST BUY**	–100.5
GRAPHIX ZONE	–88.3
QUINTEL ENTERTAINMENT	–73.3

*Reported as a "buy," issue date Oct. 20, 1997
**Reported as a short sale, issue date June 23, 1997
DATA BLOOMBERG FINANCIAL MARKETS, BUSINESS WEEK

The Inside Wall Street Scorecard

B elow are the 172 stocks featured in Inside Wall Street during 1997. For each stock, we've recorded the last closing price before the column became public. In almost ases, this is a Thursday price. Then, using that closing e as a base, we computed one-day, one-month, three- th, and six-month percentage returns. When any of those periods fell on a weekend, the prior Friday's closing price was used. When there was no Thursday trading, we used Wednesday's closing price. When there was no trading in a specific stock on a measurement date, we used the next trading day's price. All prices have been adjusted for stock splits. The Thursday close is 11 days before the issue date.

STOCK	THURS. CLOSE	PERCENT CHANGE 1 DAY	1 MO	3 MOS	6 MOS	ISSUE DATE
ER INDUSTRIES	13¼	1.8	4.5	-3.6	22.7	01/13
HIX ZONE	3	16.7	-12.5	-58.3	-88.3	01/13
KSTONE	10¼	0.0	-20.7	-12.2	-17.1	01/13
YSTEMS	11 1/16	9.0	21.5	23.6	33.6	01/13
SCO	8½	5.9	8.8	38.2	63.2	01/20
E	34⅞	0.4	17.9	30.5	51.6[1]	01/20
IOTHORACIC SYSTEMS	21⅛	-1.2	7.5	-17.9	-42.2	01/20
WEBBER	18½	13.1	29.7	12.6	32.9	01/27
PHERE	22¼	-4.5	-1.7	-30.9	-32.6	01/27
AFEM	14½	6.9	28.4	5.2	-9.9	01/27
NCED HEALTH	11	10.2	27.3	71.6	63.6	02/03
ON-DAVIS	13½	0.0	-20.4	-25.0	-38.9	02/03
JONES	38½	2.9	4.5	5.2	11.5	02/10
INGER INTERNATIONAL	11⅜	1.1	-11.0	-12.1	4.9	02/10
AH'S ENTERTAINMENT	18⅛	10.3	-2.1	2.1	21.4	02/17
NCE SEMICONDUCTORS	7½	6.7	10.8	0.8	100.0	02/17
STE	16⅝	8.3	-5.3	-15.0	-5.3	02/17
HOLDING	31	3.2	10.1	-31.0	-18.1	02/24
HOME	26⅜	2.4	0.9	-0.9	25.1	02/24
BOY	15¼	0.8	-3.3	-9.8	-20.5	02/24
	5⅜	4.3	0.0	-4.3	-7.4[1]	03/03
MM INTERNATIONAL	3 3/16	11.8	2.0	-9.8	-13.7	03/03
	12⅛	2.1	10.3	17.5	8.2	03/03
ALDEN FINANCIAL	18½	3.4	-6.1	13.5	48.0	03/10
TECHNOLOGY	21½	-1.7	-14.0	-14.0	-25.6	03/10
AX	37½	4.7	-1.7	2.0	14.2	03/10
ANA	20⅞	8.4	1.2	10.8	17.1	03/17
SPHERX	2⅛	20.6	35.3	30.9	52.9	03/17
CONSTRUCTION[n]	11⅝	3.2	1.1	-5.4	-19.4[2]	03/17
EN WEST FINANCIAL	68⅞	0.5	-13.1	4.0	24.9	03/24
ION	4¼	11.8	11.8	26.5	19.1[2]	03/24
	28¼	0.4	-11.2	7.8	-1.7	03/24
MEDICAL	16¼	3.7	-14.2	-1.5	11.6	03/31
ECTION ONE	9½	13.2	1.3	40.8	90.8	03/31
TECHNOLOGY GENERAL	13¾	6.4	-6.4	-2.7	8.6	03/31
POT ENTERPRISES	9⅞	1.3	-2.5	13.9	13.9	04/07
T CO. OF N. J.	16¾	1.5	4.5	13.4	14.9	04/07
L 8	13	1.9	-13.5	27.9	79.8	04/07
MISYS COMM.	8⅞	15.5	2.8	70.4	177.5	04/14
IONE	8¼	12.9	14.3	-5.7	-10.0	04/14

STOCK	THURS. CLOSE	PERCENT CHANGE 1 DAY	1 MO	3 MOS	6 MOS	ISSUE DATE
CAREMATRIX	16⅛	3.1	21.7	59.3	58.9	04/14
FLUOR	52	-3.8	-3.6	6.0	1.1	04/21
SOTHEBY'S INTERNATIONAL	15⅝	-0.8	-1.6	8.0	31.2	04/21
DANIELSON HOLDING	7⅛	-5.1	-8.5	20.3	20.3	04/21
LEHMAN BROS.	32¾	3.4	16.8	38.9	61.3	04/28
DONALDSON LUFKIN	19⅝	5.1	14.0	62.7	79.6	04/28
NAMIBIAN MINERALS	4 3/16	4.1	1.4	-8.2	-9.6	04/28
TRANSACTIONS SYS.	29⅛	-0.4	26.0	29.4	46.4	04/28
FAMILY GOLF	12 43/64	3.2	54.5	28.9	55.2	05/05
AQUAGENIX	6 11/16	4.6	3.7	-3.7	11.9	05/05
PRIME SERVICE	21	2.4	14.9	52.4[1]	52.4[1]	05/05
TRANSATLANTIC HOLDINGS	55 17/64	2.4	7.5	31.8	24.6	05/12
HEILIG-MEYERS	14⅝	2.6	12.8	15.8	-8.5	05/12
HIRSCH INTERNATIONAL	17½	7.1	30.0	25.7	7.9	05/12
RATIONAL SOFTWARE	15⅛	4.0	19.6	2.0	-33.6	05/19
PURE ATRIA	11	10.2	42.0	59.1[1]	59.1[1]	05/19
CHARMING SHOPPES	5 11/16	1.1	-6.5	-3.2	-17.7	05/19
VITECH AMERICA	11½	14.1	30.4	34.8	67.4	05/19
PENINSULAR & ORIENTAL	21½	0.6	-2.3	-5.2	10.5	05/26
EGGHEAD.COM[n]	4½	12.5	2.8	38.9	91.7	05/26
CARTER-WALLACE	14⅛	28.3	12.4	15.0	13.7	05/26
TECH-SYM	29⅝	6.8	12.2	11.0	-1.7	06/02
STRIDE RITE	13¾	6.4	-1.8	-11.8	-15.0	06/02
CRYSTAL SYST. SOLUTIONS	21⅝	7.5	12.7	26.0	0.6	06/02
IN FOCUS SYSTEMS	12⅜	5.1	-2.0	-3.0	32.8	06/09
MONACO COACH	14⅞	3.4	6.9	13.8	18.4	06/09
SIMULA	17	5.1	13.2	36.8	-6.6	06/09
TARRANT APPAREL	7¼	0.9	6.0	6.9	3.4	06/09
OPTA FOOD INGREDIENTS	6 1/16	21.0	15.2	-14.3	-21.0	06/09
USA DETERGENTS	12⅜	5.1	-19.2	-5.1	-14.6	06/09
HARKEN ENERGY	5	18.8	30.0	23.8	8.8	06/16
DASSAULT SYSTEMES	31¼	3.7	11.0	-4.3	-2.7	06/16
U.S. ENERGY SYSTEMS	3⅞	19.4	24.2	-21.0	-16.1	06/16
ADVEST GROUP	18⅛	28.3	22.1	30.3	21.4	06/23
COACHMAN INDUSTRIES	17¼	3.6	11.7	13.9	29.9	06/23
FLEETWOOD ENTERP.	29⅜	3.8	2.3	13.6	36.8	06/23
THOR INDUSTRIES	16	4.2	7.8	23.4	37.2	06/23
NATIONAL PATENT DEVELOP.	7 7/16	9.1	15.7	65.3	63.7	06/23
MELLON BANK	46¼	0.0	3.2	19.2	29.7	06/30
BIOMATRIX	17	12.5	27.9	122.1	55.9	06/30

continued on page 74

Finance

continued from page 73

STOCK	THURS. CLOSE	PERCENT CHANGE 1 DAY	1 MO	3MOS	6MOS	ISSUE DATE
MORTON'S REST. GROUP	17[illegible]	2.1	19.3	33.6	15.7	06/30
MERCANTILE STORES	56¼	12.7	17.0	11.2	2.6	07/07
QUINTEL ENTERTAINMENT	15	9.2	-7.5	-20.6	-73.3	07/07
MAXXIM MEDICAL	15⅜	11.4	23.6	68.3	32.9	07/07
ENVOY	32¼	-0.8	-7.8	-14.7	-10.1	07/14
GRYPHON HOLDINGS	15¼	4.8	9.6	4.8	5.6	07/14
REGENCY HEALTH	14⅝	-0.4	45.3	50.4[1]	50.4[1]	07/14
LITTON INDUSTRIES	50¾	4.4	-2.1	9.9	10.1	07/21
HEADWAY CORP. RES.	4[illegible]	0.0	8.7	34.1	14.5	07/21
DIAMETRICS MEDICAL	8¼	3.6	-10.4	2.1	-20.0	07/21
SUNGARD DATA	26[illegible]	-1.6	-6.5	-4.9	12.3	07/28
VAIL RESORTS	24¼	1.5	-2.5	9.6	6.6	07/28
EPL TECHNOLOGIES	13[illegible]	-2.8	-7.4	9.3	-18.5	07/28
CONSOLIDATED STORES	39⅝	2.2	-6.3	-2.1	2.2	08/04
LEGGETT & PLATT	44[illegible]	-0.3	0.8	-2.8	2.1	08/04
UCAR INTERNATIONAL	43¼	1.3	6.6	-6.4	-18.0	08/04
ZIONS BANCORP.	35½	0.0	0.0	10.6	21.5	08/04
CIRCUS CIRCUS	24	0.8	1.6	-1.3	1.6	08/04
GUCCI	62 13/16	1.9	-2.5	-37.3	-36.9	08/04
SALOMON BROTHERS	64	2.1	-6.4	21.3	30.3[1]	08/11
INT'L COMFORT PRODUCTS	7[illegible]	10.4	2.4	-4.0	-2.4	08/11
MALLON RESOURCES	7¼	14.3	11.1	33.3	0.0	08/11
OPTEK TECHNOLOGY	15⅛	5.0	19.8	19.8	47.1	08/11
MYLAN LABORATORIES	16¼	6.7	25.9	29.6	6.7	08/11
STMICROELECTRONICS[n]	90[illegible]	0.8	0.1	-23.0	-19.7	08/25
STERLING VISION	6[illegible]	18.5	-1.8	-8.1	-27.0	08/25
AMER. CLASSIC VOYAGES	12¼	3.1	6.1	30.6	84.7	08/25
ARCHER DANIELS MIDLAND	20[illegible]	4.5	13.7	4.5	7.5	09/01
ADVANCED HEALTH	19⅞	3.1	18.9	-31.8	-19.8	09/01
PACIFIC CHEMICAL GROUP	14[illegible]	2.4	-26.7	-31.0	-44.8	09/01
READER'S DIGEST	29¼	1.1	-1.1	-18.2	-9.2	09/08
RAYONIER	47⅞	2.5	1.0	2.6	-11.0	09/08
EARTHLINK NETWORK	13½	7.4	38.0	41.7	263.0	09/08
STEWART & STEVENSON	25¼	2.2	-6.0	-8.5	-1.2	09/15
TCI SATELLITE ENTER.	8	9.4	3.1	-10.9	-16.4	09/15
LERNOUT & HAUSPIE	13¾	14.3	77.3	64.5	212.7	09/15
RELIANCE GROUP HOLDINGS	12 9/16	3.0	14.9	6.5	38.3	09/22
MARKETING SERVICES GRP.	4[illegible]	-1.9	4.5	-7.0	-20.4	09/22
TRANSACT TECHNOLOGIES	17 11/16	1.1	10.2	-35.0	-45.2	09/22
ZOLTEK	53⅞	7.5	5.8	-48.3	-31.1	09/29
ALASKA AIRGROUP	30½	4.9	4.5	19.7	87.3	09/29
ZONAGEN	32[illegible]	3.3	19.8	-36.8	-23.7	09/29
REYNOLDS METALS	70	-0.5	-5.5	-17.0	-6.5	10/06
ITT INDUSTRIES	32⅛	1.0	1.0	-8.2	19.5	10/06
TEVA PHARMACEUTICAL	55⅞	0.6	-10.3	-20.1	-25.8	10/06
BARNES & NOBLE	29¼	2.5	-14.1	12.4	30.5	10/13
JOHN WILEY & SONS	38½	3.4	14.0	38.0	42.9	10/13
JW CHARLES	10¾	16.3	22.1	7.0	9.3	10/13

STOCK	THURS. CLOSE	PERCENT CHANGE 1 DAY	1 MO	3MOS	6MOS
BEST BUY	12[illegible]	1.8	16.6	63.8	191.7
FIRSTPLUS FINANCIAL	57⅛	3.5	-12.3	-49.7	-16.0
HOMEBASE	9¾	6.4	-9.6	-19.9	-16.0
BINDLEY WESTERN	21[illegible]/64	2.2	4.0	-1.8	29.2
APRIA HEALTHCARE	16 9/16	-0.4	-7.9	-33.1	-47.9
SJNB FINANCIAL	34½	5.1	10.1	6.5	10.1
MGM GRAND	41½	8.0	-0.3	-14.5	-17.8
TECHNICAL CHEMICAL	15 11/16	11.6	-9.0	-19.5	-37.8
GENCOR INDUSTRIES	6¼	9.5	35.0	60.0	187.0
TEXAS INSTRUMENTS	51 7/16	3.7	-3.5	6.2	24.7
UNION TEXAS PETROLEUM	22½	1.1	-3.1	-15.8	-10.3
JACKSON HEWITT	43	5.2	56.0	57.6[1]	57.6[1]
ZALE CORP.	26¾	-2.1	-13.1	-5.8	10.3
AMSOUTH BANCORP.	34 21/64	-1.7	9.5	6.8	18.2
COVER-ALL TECHNOLOGIES	3 13/16	14.8	0.0	-8.2	-24.6
AMERICAN PAD & PAPER	13 3/16	3.8	-5.2	-35.1	-47.4
AMC ENTERTAINMENT	21½	2.9	-5.8	25.6	-7.3
BIG FLOWER HOLDINGS	23¼	-1.1	-5.4	16.9	41.9
CITRIX SYSTEMS	47 61/64	1.8	-1.5	-4.3	21.1
CHICAGO MINIATURE LAMP	19 61/64	6.9	1.9	39.9	82.3
SWISHER INTERNATIONAL	17⅜	3.6	-5.4	-17.3	-46.4
VIACOM INTERNATIONAL	33 11/16	0.2	10.0	30.4	71.1
GALOOB TOYS	11[illegible]	8.2	-12.5	-26.6	-8.2
ALPINE GROUP	18⅞	3.6	-8.9	7.3	0.7
VENATOR GROUP[n]	21[illegible]	2.1	-3.2	13.0	-5.3
TRANSMEDIA NETWORK	5½	12.5	2.3	4.5	13.6
SUN INTERNATIONAL HOTELS	40 5/16	-0.8	-6.7	8.2	13.8
SNYDER COMMUNICATIONS	37	0.7	-2.5	13.7	2.9
BIG ENTERTAINMENT	6⅜	2.9	-3.9	-22.5	-23.5
SANMINA	30 17/32	-5.9	-12.6	25.3	19.1
NIAGARA	10	2.5	-12.5	-11.9	-3.1
AMERICAN SOFTWARE	8⅝	1.4	7.2	-16.7	-10.1
BANKAMERICA	74[illegible]	-1.9	-8.8	12.2	14.0
BELLSOUTH	57[illegible]	-1.2	1.9	7.5	17.2
FANNIE MAE	56⅜	-0.6	8.4	15.6	11.2
CISCO SYSTEMS	53 9/16	-0.2	8.1	18.7	53.3
P-COM	14¼	-1.7	14.1	26.1	-28.6
SYMS	12[illegible]	0.0	3.6	16.1	16.1
SUMMIT BANCORP.	50½	-0.1	-3.8	1.1	-7.4
ICN PHARMACEUTICALS	32⅝	1.0	-8.0	35.6	37.2
SHORT PICKS					
EXIDE	21	-7.1	6.5	23.2	-2.4
ENAMELON	22½	15.6	26.7	15.6	23.9
BEST BUY	6[illegible]	5.0	-11.9	-91.6	-100.5[3]
COOPER CAMERON	42[illegible]	0.7	-13.5	-63.2	-41.2
AVERAGE % CHANGE		4.7	5.4	7.8	15.1

DATA: BLOOMBERG FINANCIAL MARKETS, BW

n=name change. [1]Takeover; based on price on last trading day. [2]Last trading day was Aug. 29, 1997. [3]Oct. 10 price, stock switched from short to long

IFFETT'S $22 BILLION EDGE

ng General Re gives him elbow room if stocks fall

n for Warren E. Buffett, success n have a downside. America's st-known stock market investor led up big profits with big bets on .S. companies. But that begs a on. Suppose Buffett wanted to n up on his more stratospheric holdings, say, to protect against a ould he make a major move it unnerving the legions of in- s who follow his every trans- ? If his agreement to buy Gen- Re Corp. is any indication, t is up to the challenge.

June 19, Berkshire Hathaway Buffett's investment vehicle, nced its biggest deal ever, buy- eneral Re, America's largest rer, for about $22 billion in In a bull market, it signals a kable redeployment of re- s. In essence, Buffett, in buy- en Re, is reducing his expo- o stocks. And he's getting Gen 24.6 billion conservatively man- investment portfolio, which come in handy in a downdraft. ly, Buffett is increasing his de- e posture without selling s in the public market.

TONIC. The key is that Berk- somewhat atypically, is pay- ith stock—issuing a stake of 18% to Gen Re shareholders. as Buffett has noted, buying shares isn't quite buying—it's ng something you own for hing else. For Gen Re, Buf- aid at a press conference that giving up "an appreciable part" erything he and other Berk- shareholders own, including s of such market highfliers as Cola Co.

at Buffett, a liquidity buff, most relish about the deal is, all the liquidity it brings. Buf- ets both the low-cost cash gen- d by a good underwriter and a at managing General Re's in- ents. Most of that portfolio is d in municipal bonds and other income instruments. For now, a hedge against stock market risk. But it also would give Buffett greater ability to load up on equities. "The biggest advantage [of the deal] is probably the chance to maximize [Gen Re's] investment portfolio," he told BUSINESS WEEK. "It may have no value tomorrow or the next month, but at some point, we think it will."

PITCHING IN OMAHA: BUFFETT IS A FAN OF "FLOAT"

HOW GEN RE BOLSTERS BUFFETT

- Gives him a new $24.6 billion investment portfolio
- Lets him deploy his new portfolio in more profitable ways
- Greatly increases his "float" from insurance premiums
- Reduces his exposure to big holdings such as Coca-Cola
- Marries his capital base to General Re's expertise and global distribution

DATA: BUSINESS WEEK

To be sure, industry analysts say this is a curious time for anyone to get more involved in reinsurance, the business of insuring insurers against the risks they take. Already, there's too much capital at work in the industry, and competition is lowering premiums.

But Berkshire and General Re see an advantage in size. Ronald E. Ferguson, General Re's chief executive and chairman, said at a news conference that his customers want bigger policies protecting against more exotic risks or a combination of risks. And that takes financial heft. Last year, General Re laid off $1 billion in business to others, including Berkshire, for a lack of resources, Buffett said. As part of a combined company with a $56 billion net worth—America's biggest—that's less likely. "They don't have constraints now," Buffett said.

TWO-WAY STREET. The very nature of insurance also appeals to Buffett, who already owns GEICO Corp., among other insurers. Buffett is a connoisseur of the float, the large sums of cash that insurance companies generate. "Float arises because premiums are received before losses are paid, an interval that sometimes extends over many years," Buffett explained in his latest annual letter to shareholders. "During that time, the insurer invests the money."

Of course, float can disappear. A flood of claims can lead to an exodus of money. But as long as an insurer is good at sizing up risk—and Gen Re's underwriting results beat the industry averages—it can produce a stream of low-cost or even no-cost funds. In fact, Jay Cohen, a Merrill Lynch & Co. analyst, says Gen Re's emphasis on liability insurance means it can hold on to premium payments for a particularly long time—since liability claims can be tied up in court for years. General Re doesn't release its float figures, but the new owner is impressed. General Re "brings a lot of float to the party," Buffett says.

The multibillion-dollar question, however, is now that Buffett is all dressed up with new financial resources, where is he going to go? Repeatedly, he has signaled his concern that stocks have grown too pricey. Should the market crack and opportunities for scooping up undervalued stock develop, his latest deal shows that Warren Buffett will be ready.

By Gary Silverman in New York, with Andrew Osterland in Chicago

REAL ESTATE

NOMURA'S ROCKET HAS A NEW LAUNCHING PAD

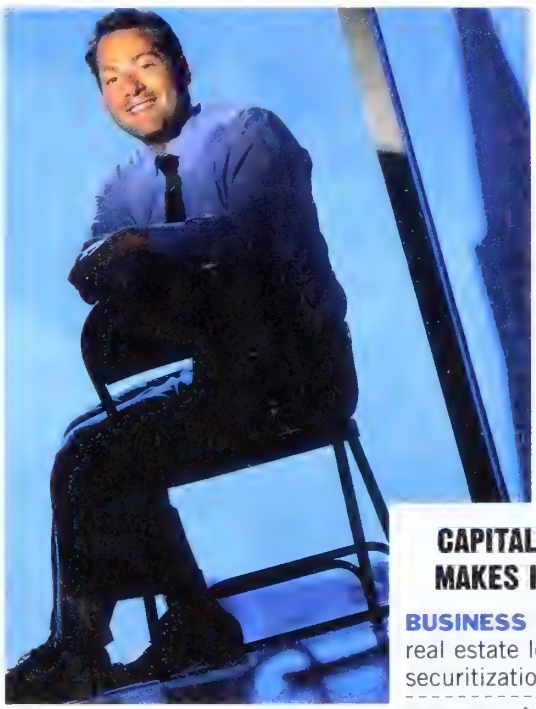
Ethan Penner vows his new lender will rival giant GE Capital

Ethan Penner, the commercial real estate kingpin, is finally getting an amicable divorce from his employer, Nomura Securities Co. After establishing Nomura as one of the largest lenders in the industry, Penner now wants to amass an even larger empire on his own.

Penner has made a name for himself by helping to create the commercial mortgage-backed securities market, which is expected to reach $75 billion this year. In 1993, Penner teamed up with Nomura to lend to the commercial real estate industry at a time when banks and insurers were on the sidelines. He also was the first to pool developers' loans into large bond offerings. Nomura wants Penner's business to keep growing, but didn't want to increase its capital exposure to the business.

On June 29, subject to board approval, Nomura is expected to set up The Capital Co. of America LLC, which will be capitalized at $500 million. Some $3 billion in assets from Nomura Asset Capital Corp., Penner's operation at Nomura, will be transferred to the new company. Initially, Capital America will be 100% owned by Nomura. But within six months, Capital America Chief Executive Penner, Chairman Michael A. Berman, and the company's employees are expected to be awarded about 15% of the firm in lieu of their bonuses. Penner is also raising private equity to bring in other investors. Ultimately, Nomura's stake could drop to about 25%.

HANGING LOOSE. With greater autonomy, Penner plans to open offices worldwide to expand into global commercial real estate lending and commercial mortgage-backed securities. He also sees big opportunities in developing countries for asset-backed securities based on credit-card debt, auto loans, and home mortgages. In fact, Penner has set his sights on becoming a diversified finance company as large as GE Capital, the diversified financial arm of General Electric Co. "Every Coke needs a Pepsi. Maybe we'll be their Pepsi, or they'll be our Pepsi," he says. "There's no reason we can't grow five- or tenfold."



This kind of outrageously overoptimistic statement is Penner's stock in trade. Of course, he is a pipsqueak compared to GE Capital, with its 67,000 employees and $3.3 billion in earnings in 1997. Penner's Nomura unit has 400 employees and made $200 million in 1997.

That hasn't stopped Penner from boasting that his company is more creative than GE Capital. It's true Penner's let-it-all-hang-loose style couldn't be more different than GE Capital's. He has generated a buzz in the real estate world by hiring E John, Bob Dylan, and the Eagles to at his annual real estate confere And Penner has the easy confidence comes from being one of Wall Str best-paid people, thanks to a shr profit-sharing deal he cut with Non In the year ended in March, 199 got a $25 million bonus, down from million in '97.

And this natural showman has r ambitious pronouncements before haven't panned out. In Septembe held an event at the House of Blu Los Angeles and even belted o karaoke version of Steppenwolf's *To Be Wild* while CNN cameras r The event publicized his intent to r $1 billion in loans within the yea musicians, then package and resell as asset-backed securities. Nine m later, Penner has made only one million loan, to Rod Stewart, a singing a more downbeat tune. Th tertainment-securitization business nonstarter," he says now.

CROWDED FIELD. Penner has also the subject of controversy in his real estate business. Some investors rivals are fuming about the uni terms and lack of disclosure of t terms in a recent Nomura $3.7 b commercial mortgage-backed secu deal. After complaints surfaced, N ra was forced to provide more d sure. Nomura says credit agencie not change their ratings as a resu

And Penner much tougher com tion than he did wh started. Other Street players, su Lehman Brothers and Credit Suisse i Boston, are now and neck with Penn real estate lending issuance of comm mortgage-backed s ties. These firms al have a global pres And without cheap ing from his foreig ent, "his capital longer limitless," one competitor.

So far, GE Capit nothing to worry But if Penner ach even some of his tious goals, this entrepreneur may his brand of rock-a finance to the wor

By Leah Na Spiro in New York

CAPITAL AMERICA MAKES ITS DEBUT

BUSINESS Commercial real estate lending and securitization

CAPITAL $500 million

EMPLOYEES 400

HEADQUARTERS San Francisco

GOAL To be the next GE Capital; will expand into global commercial real estate, credit card, mortgage and auto loan lending and securitization

OWNERSHIP Ultimately could be 75% owned by management and private investors and 25% by Nomura

DATA: NOMURA ASSET CAPITAL CORP., BUSINESS WEEK

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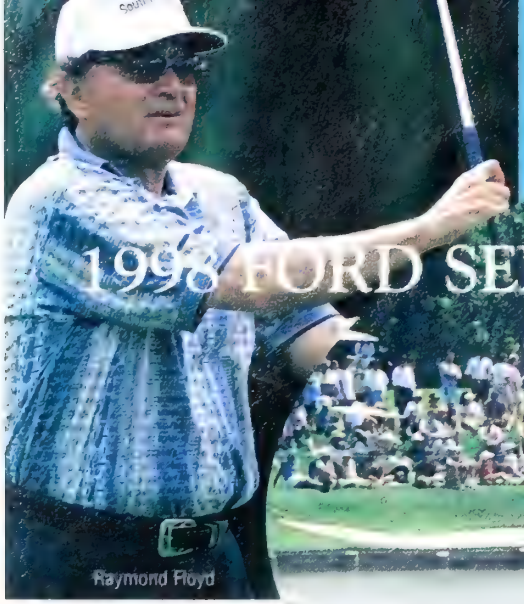


Raymond Floyd

1998 FORD SENIOR PLAYERS Championsh

Jim Colbert

The FORD SENIOR PLAYERS Championship, the third of the SENIOR PGA TOUR's four major championships for 1998, will be played the week of July 6-12 at the Tournament Players Club of Michigan.

The members of the 78-man field will compete in the Detroit suburb of Dearborn for shares of a $2-million purse, including a $300,000 first prize. But, more importantly, they will be playing for the right to add their name to a distinguished list of past champions.

That list reads like a "Who's Who" in golf. Included are some of the game's greatest players: Arnold Palmer, Gary Player, Billy Casper, Jack Nicklaus and Raymond Floyd.

"It's a tournament that carries a lot of clout if you win it," said Palmer, who captured the second and third FORD SENIOR PLAYERS Championships in 1984-85. "It's one of the tournaments that is more noticed by everyone in golf, and I think that's very significant."

"The FORD SENIOR PLAYERS Championship has special meaning to the players of the SENIOR PGA TOUR," said PGA TOUR Commissioner Tim Finchem. "Along with having the strongest field of the SENIOR TOUR season, the tournament is played on a true test of golf, the TPC of Michigan. The competitors truly will be challenged.

"This year's event is dedicated to Larry Gilbert, a man of real integrity who enriched our sport through his positive outlook on life and his sense of humor," Finchem added."

Gilbert was diagnosed with lung cancer less than two months after winning last year's FORD SENIOR PLAYERS Championship. He died in January at the age of 55.

Miller Barber won the first FORD SENIOR PLAYERS Championship, held at Cleveland's Canterbury Golf Club in 1983. Barber has the distinction of being the only player to compete in all 15 previous tournaments. He has enjoyed five other top-10 finishes, including a tie for second in 1985, a distant 11 strokes behind Palmer.

"The FORD SENIOR PLAYERS Championship is the players' tournament. It's a great tournament, and everyone works extremely hard to put on a first-class event," said the 67-year-old Barber, who ranks second to Lee Trevino on the SENIOR TOUR's list of all-time winners. Trevino has won 27 titles, Barber 24.

FORD SENIOR PLAYERS Championship Television Schedule

Thursday, July 9
First Round of Competition
ESPN, 3:00-5:00 p.m. EDT

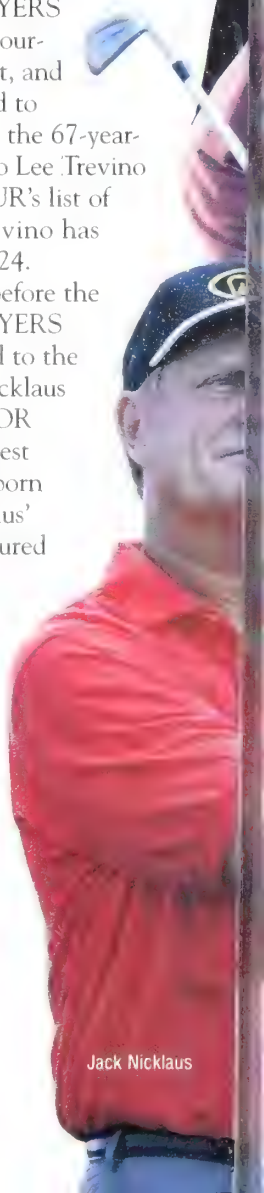
Friday, July 10
Second Round of Competition
ESPN, 3:00-5:00 p.m. EDT

Saturday, July 11
Third Round of Competition
ABC, 1:30-2:30 p.m.
and 5:00-6:00 p.m. EDT

Sunday, July 12
Final Round of Competition
ABC, 5:00-7:00 p.m. EDT

In 1990, the year before the FORD SENIOR PLAYERS Championship moved to the TPC of Michigan, Nicklaus established the SENIOR TOUR record for lowest 72-hole total at Dearborn Country Club. Nicklaus' 27-under-par 261 featured consecutive 64s in his third and fourth rounds the only time the event was played at Dearborn Country Club.

Palmer and Dave Stockton (1992 and 1994) are the only players with two victories. Chi Chi Rodriguez came close, winning in 1986 before finishing second to Player in 1987. Nicklaus lost the only playoff in FORD SENIOR PLAYERS Championship history in 1995 to J.C. Snead, who was runner-up (along with Trevino) to Stockton in 1992.



Jack Nicklaus

PHOTOS BY PGA TOUR

FORD SENIOR PLAYERS CHAMPIONSHIP

FORD SENIOR PLAYERS Championship Results

CANTERBURY GOLF CLUB, Cleveland, OH

1983	Miller Barber	One stroke over Gene Littler
1984	Arnold Palmer	Three strokes over Peter Thomson
1985	Arnold Palmer	11 strokes over Miller Barber, Lee Elder, Gene Littler and Charles Owens
1986	Chi Chi Rodriguez	Two strokes over Bruce Crampton

SAWGRASS COUNTRY CLUB, Ponte Vedra Beach, FL

1987	Gary Player	One stroke over Bruce Crampton and Chi Chi Rodriguez

TPC AT SAWGRASS (Valley Course), Ponte Vedra Beach, FL

1988	Billy Casper	Two strokes over Al Geiberger
1989	Orville Moody	Two strokes over Charles Coody

DEARBORN COUNTRY CLUB, Dearborn, MI

1990	Jack Nicklaus	Six strokes over Lee Trevino

TPC OF MICHIGAN, Dearborn, MI

1991	Jim Albus	Three strokes over Bob Charles, Dave Hill and Charles Coody
1992	Dave Stockton	One stroke over J.C. Snead and Lee Trevino
1993	Jim Colbert	One stroke over Raymond Floyd
1994	Dave Stockton	Six strokes over Jim Albus
1995	J.C. Snead	Won playoff over Jack Nicklaus
1996	Raymond Floyd	Two strokes over Hale Irwin
1997	Larry Gilbert	Three strokes over Isao Aoki, Bob Dickson, Jack Kiefer and Dave Stockton

The FORD SENIOR PLAYERS Championship was held at Canterbury through 1986, then moved for three years to Ponte Vedra Beach, FL, the home of PGA TOUR headquarters. It was played at Sawgrass Country Club in 1987, then in 1988-89 on the Valley Course of the Tournament Players Club at Sawgrass.

Players gain entry into the FORD SENIOR PLAYERS on the basis of points accumulated (money won) from the tournament immediately following the previous year's event through the tournament preceding the next FORD SENIOR PLAYERS Championship, which this year is the inaugural State Farm Senior Classic in Columbia, MD.

This marks the eighth FORD SENIOR PLAYERS to be held at the TPC of Michigan, matching the number of years it has been held elsewhere. The second week of July will determine the winner of the 16th FORD SENIOR PLAYERS Championship.

old Palmer

The other FORD SENIOR PLAYERS Championship winners have been Casper (1988), Orville Moody (1989), Jim Albus (1991), Jim Colbert (1993) and Floyd (1996). Floyd finished second to Colbert in 1993, while Albus was the runner-up to Stockton in 1994. Stockton was part of a four-way tie for second last year, one stroke behind Gilbert.

Ford Motor Company became title sponsor of the FORD SENIOR PLAYERS Championship in 1993. The Tournament Players Club is part of the Ford Motor Land Development Corporation's Fairlane Complex. The land on which the TPC sits was purchased in 1915 by Henry Ford, whose hometown was Dearborn.

"The FORD SENIOR PLAYERS Championship is an exciting event for the Southeast Michigan community to participate in each year," said tournament chairman Peter Pestillo, Ford's Executive Vice President, Corporate Relations. "Through this tournament, Ford and its employees have an additional opportunity to help charities in Southeast Michigan, as it does in other communities around the world where Ford does business.

"Since 1993, with Ford involvement, the tournament has experienced tremendous rowth in proceed dollars going to worthwhile harities," Pestillo added. The 1997 donation –$600,000—lifted to $3 million the charity total nder Ford sponsorship.

OUT TO PASTURE

Waitt is dumping Gateway's trademark cows–but not th Holstein spots on boxes–as moves execs to San Diego

COMPUTERS

GATEWAY LOSES THE FOLKSY SHTICK

CEO Waitt looks west to lure sophisticated talent

At Gateway's North Sioux City, S. D., offices, Chief Executive Theodore W. Waitt meets often and easily with everyone from the chief financial officer to rank-and-file workers. Even after building his personal-computer business from a two-person shop in his parents' barn to a sprawling $6 billion company, Waitt does much of his managing by strolling the hallways. In early June, he popped in on a team designing new self-help software called "Help Spot" and peppered it with questions. The 35-year-old CEO's verdict? "Cool. Keep it up," according to one of the team members.

But impromptu face time with the boss is about to become a Prairieville relic. Come August, Waitt and a team of 20 executives and assistants will move from the cornfields of South Dakota to the beaches of San Diego, Gateway Inc.'s new administrative headquarters. Manufacturing operations and its 5,500 workers will remain in North Sioux City. As for the group out west, it could expand to 200 within a year and, later, swell to 1,000 employees.

LOCAL HERO. Why is Waitt leaving Sioux City, the land where his family raised cattle for five generations and where he has become a hometown hero? It's essential for ensuring Gateway's future, he says. Waitt wants the world's second-largest direct marketer of PCs to increase revenues 40% to 45% per year, to hit sales of $25 billio 2001. To get there, he needs top managers and engineer hasn't been able to attract to S Dakota. "It's all about growt the end of the day," Waitt say

With better talent, Waitt fi he can tap into markets wel yond Gateway's stronghold of ing consumers high-end PC phone. He wants to increas 4.9% slice of the $18 billion s business market. To do that, says he must build up a consu service for small and midsize nesses, offering expertise in areas as Web-site setup and de

At the same time, he's be that San Diego's wider pool gineers can help him reach consumers by coming up with to make PCs easier to use. A example of Waitt's plan is Spot, a program scheduled f lease in mid-July that offer tailed tutorials for customers who problems with everything from Int access to simple word processing. also wants to sell more services, p ularly Internet access. One new of allows consumers to buy a PC, incl Net access, for a flat monthly f $50. And, in a controversial move expanding Gateway's retail outle as many as 400 from the current

The risks of Waitt's new gr strategy are staggering. With the to San Diego, Gateway is turnin back on the folksy, Midwestern c and marketing that have define company and helped make it a name. Even its trademark Ho cows—featured in many of its a winning ads—are being put out t ture. Newly minted President J Weitzen thinks Gateway needs to up its marketing to appeal more t sumers who buy cutting-edge PCs a small businesses. But dumping cessful corporate image could tu the company's existing custo "Waitt's strategy is [based on] be the middle of nowhere," says Jam Schrager, clinical professor of ent neurship and strategy at the Univ of Chicago. "I think he's being a tr

If employees think the same morale could suffer. Waitt has a

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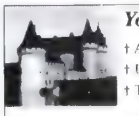

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been the company cheerleader. With his ponytail, boots, and hearty barroom laugh, Waitt is one of their own. "Do employees feel a loss? Sure, they do," says Robert N. Beck, Gateway's former senior vice-president for human resources, who left in January when Weitzen brought in his own team. Workers also worry that their jobs may eventually migrate to Southern California. "Are we going to have to move as well?" asks one employee. "I, for one, prefer to call North Sioux City home."

Waitt's laugh turns to a sigh when he hears such concerns. He realizes people are sensitive to his departure—he kept the expansion under wraps, waiting until the last hour to announce it to employees on Apr. 7. "We knew it would be a very emotional issue here," he says. Still, he insists any worries are overblown. "It's an additional location," he insists. "It's not a move or a relocation."

Besides, the new San Diego digs could soon bear fruit, he says. During the past year, Gateway has been unable to fill about 250 job openings in finance, marketing, and engineering in North Sioux City. After the San Diego announcement, Waitt says he's seeing "a whole new level of candidate."

Waitt realizes he needs all the help he can get. Gateway has stumbled over the past year, while direct-marketing rival Dell Computer Corp. has become the envy of the industry. Although Gateway's sales increased 25% in 1997, to $6.3 billion, its net income was cut in half, to $110 million, because of an embarrassing $107 million loss in the third quarter due to overestimated demand. "They blew it," says analyst Louis J. Mazzucchelli Jr. of Gerard Klauer Mattison & Co.

What's more, Gateway is retreating from the big corporate market it targeted just last year. After trying to go up against Dell and IBM, the company found that it was simply overmatched. Gateway couldn't afford to pay for the expanded sales team it needed to knock on the doors of big corporate clients. Gateway's stock is trading at 44, 25% off its 52-week high. "Dell is such a powerhouse that Gateway kind of gets left in its shadow," says Jane Snorek, research analyst for Oberweis Asset Management Inc., which recently sold its Gateway stock because it was underperforming other PC companies.

RISKY RETAILING? Analysts fear Waitt's planned expansion of Gateway's retail outlets—called "Country Stores"—could lead to another misstep. The stand-alone stores only sell Gateway gear and are about half the size of a typical computer store because they don't include a warehouse. The company's eightfold expansion of the stores comes just as other PC makers are scrambling to imitate the cost efficiencies of direct sales as demonstrated by Dell. But Waitt insists the stores will be a plus. "Only 25% of the consumer and small-business market bought PC hardware over the telephone or the Internet, and we don't see that getting over 50% anytime soon," he says.

Still, many analysts are leery of the retail push. Unless it leads to big market-share gains, it's "a losing proposition," says Piper Jaffray analyst Ashok Kumar. Building a retail chain is hugely expensive—the cost to launch a Gateway store is about $1.5 million a year, or $450 million for 300, say analysts. Other PC makers haven't fared well in retail: Tandy Corp. sold its Incredible Universe and Computer City stores because it couldn't turn a profit.

Even with the retail push, Waitt will have a hard time hitting his target of $25 billion in sales in 2001. At Gateway's current 25% revenue growth it would reach some $15 billion by It will be extremely difficult to pic another $10 billion in sales in the kets Gateway is targeting, say anal "There's no way in hell," says Ku "They must be smoking something not legal." This year, Gateway sale projected to increase 27%, to abou billion.

Already, Waitt is building the agement team that he expects to him prove doubters wrong. He recr Weitzen and David Robino, exec vice-president for administration, AT&T. "We needed to get a better of people than we have here, with p who have more experience," he Both men influenced his decision to

During interviews, asked: "Are you willi do this?" Waitt re "because it's a seriou cern if you're really t to build a [big] comp

Waitt isn't lea home just to hire engineers and top though. With a tast sun and beaches, h gan renting a vac home in San Diego i mid-'90s and boug $14.4 million mansi the city's tony La neighborhood last mer. But he insist move isn't for his benefit. Gateway Coopers & Lybrand a market study of s cities, including Ch to find out where it best recruit highl workers—and San came up on top.

As for the Sioux Ci gion, it's losing more than a comp call its own. The local economy, on pendent on agriculture, has ben from Gateway's high-paying white- and assembly jobs. The region's ployment rate has dropped to 3.4% 8.3% in 1985, when Gateway was ed. Now, the loss of Gateway's to could hurt everything from tax rev to the real estate market. With packing, "everyone is kind of holding breath, waiting to see what the imp going to be," says Ritch LeGrand, of a local real estate appraisal co As Waitt moves his headquarters the Midwest, he may find that he convince his customers to follow.

By Roger O. Crock
North Sioux City

CALIFORNIA, HERE WE COME

Best known as a direct marketer of personal computers for consumers, Gateway is taking several steps to try to push the business model beyond simple computer assembly

NEW HEADQUARTERS To more easily attract the engineers and top execs needed to boost its technical expertise, Gateway is building a new administrative headquarters in San Diego.

BEYOND MANUFACTURING Looking to do more than just PC assembly, Gateway plans to hire 100 new engineers and other workers to develop everything from customized software for technical support to more cutting-edge product design.

INNOVATIVE PRODUCTS AND SERVICES Gateway is offering a novel program so customers pay one monthly fee for Internet access and purchasing a PC. More such offerings are on the way.

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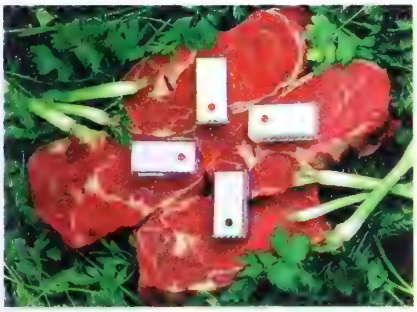
NING: RED NS 'REFROZEN'

MARKETS DON'T HAVE sections marked "re-," but they probably . Accidents happen. acturers don't always fridges cold n. Goods being ed sometimes a curb too Either way, ners may not about it until at the product. emperature from Sandia nal Laborato-ay have a solu-nvented by re-hers David ez and Mo poor, it consists of a memory alloy of nickel tanium on a piece of the size of a postage One end of the wire is ed to the paper. The is tethered to a green, ize shutter that covers dot. When the temper-rises above 32F, the shrinks, pulling the shutter into a tiny and exposing the red derneath (picture). Re-freezing will not bring the green shutter back out.

Food processors are leery about the new sensors. Jenny Scott, a senior director of food safety programs at the National Food Processors Assn. in Washington, says refreezing poses few health hazards because most cases occur in too short a time frame to allow bacteria to proliferate. But Scott admits there are "quality issues." And that's exactly what the sensor will address. Sandia's Shahinpoor says that the sensors, produced in volume, will cost just a few cents each. So for pennies, manufacturers who want to reassure finicky customers will be able to put proof right on the label. *Nellie Andreeva*



TELLTALE DOT: *A temperature sensor activates the change from green*

DING RAZZLE-DAZZLE TO FLASH CHIPS

ALL MEMORY CHIPS ARE IN THE DOLDRUMS BECAUSE sia's financial woes. Flash memory chips remain hot. flash market is projected to climb 13% this year, to billion, because the chips are used in such fast-wing products as cell phones and digital cameras. lash may get hotter now, thanks to Israeli startup un Semiconductor Ltd. It has invented a memory for storing data that it says could halve the size—thus the cost—of flash chips, which retain their data n the power is switched off. The tiny cells also could e it easier to build flash-memory blocks into micro-essors and other logic chips, further conserving sili-real estate. The technology so impresses Israeli chip-er Tower Semiconductor Ltd. that it has taken an ity stake in Saifun. The pair has teamed with child Semiconductor Corp. in the U.S. to design s using the midget memory cells. Saifun Chief Oper-g Officer Kobi Rozengarten says the new flash chips ld be ready by this time next year. *Neal Sandler*

TRANSISTORS MAKE A QUANTUM LEAP

FOR NEARLY A DECADE, researchers have been able to build transistors tiny enough to switch on and off with the movement of a single electron. These switches promise "quantum" computers the size of a thumbtack with supercomputer powers. But progress has been disappointingly slow—mainly because of a lack of tools for analyzing the workings of such teensy transistors.

Scientists at Yale University say they have solved that problem—and, in the process, created an ultrafast single-electron transistor. The breakthrough involves inducing a tiny region in the transistor to "resonate" as each electron arrives. This creates a radiolike signal that allows the movements of individual electrons to be tracked. The resonance also gives an extra push to electrons moving through the switch. That makes the transistor blindingly fast—1,000 times speedier than any previous device. "Our invention is an enabling technology for developing tomorrow's quantum computers," says Daniel E. Prober, professor of applied physics at Yale.

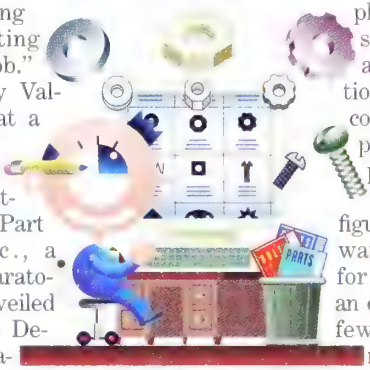
But the first applications are likely to be in astronomy and microscopy. The transistors can be used to amplify light coming from distant stars or microscopic samples. Their speed and sensitivity enable them to relay both the light's intensity and its wavelength. Thus, scientists could collect data about the chemical composition of stars or specimens while they record visual images—without the need for spectrographic instruments. □

A WAREHOUSE OF VIRTUAL PARTS

DESIGN ENGINEERS WASTE precious time searching catalogs for some existing part to include in a design. Bruno Valdes, a staff engineer with IBM's Storage Products Div. in San Jose, Calif., dubs such catalog searches "the most time-consuming and distracting part of the job."

That's why Valdes jumped at a new alternative: a searchable online catalog from InPart Design Inc., a startup in Saratoga, Calif. Unveiled this year, the DesignSuite catalog already contains more than 150,000 digital models of standard parts—from gears and bushings to pumps and electric motors—produced by two dozen suppliers.

The software for accessing DesignSuite can be downloaded from the Internet (www.inpart.com) and licensed for as little as $1,000. Retrieving a digital model to plug into a design costs $20, a mere fraction of what it costs to redraw parts from a paper catalog. IBM's Valdes figures the software can pay for itself after an engineer buys fewer than 10 models. □



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PUBLIC HEALTH

HIV: SOBERING NEWS FROM THE FRONT

AIDS' unchecked spread returns the focus to prevention

Back in 1989, deadly HIV was spreading in the dark corners of America, striking drug users, the homeless, and others on the edges of society. So the National Institutes of Health began a study to find out if educational efforts such as those that had slowed HIV transmission among gay men could also work in inner cities. "The naysayers were legion," recalls David D. Celentano, an epidemiologist at the Johns Hopkins University School of Public Health and one of the study's principal investigators. "They said people won't change their sexual behavior."

The team forged ahead anyway, offering HIV prevention and counseling sessions to hundreds of men and women plucked from inner-city clinics. "These folks are all at very high risk for HIV, with multiple sex partners, partners with sexually transmitted diseases, and little condom use," says Celentano. The results, announced on June 18, show that the skeptics were wrong. The effort doubled condom use and cut high-risk sex—and gonorrhea in men—in half. That should curb new HIV infections, scientists say. "The study showed that interventions can make a difference even in the most disadvantaged populations," says Dr. Steven E. Hyman, director of the National Institute of Mental Health.

But this good news is sadly isolated and fragile. Against a global backdrop, the U.S. study is a poignant reminder of opportunities lost. At the 12th World AIDS Conference beginning on June 28 in Geneva, the world will hear, once again, how medicine's arsenal of drugs and governments' limited policies have barely made a dent in the spread of HIV. Tantalizing scientific discoveries about the virus' vulnerabilities will also be hot topics. "But we have to realize that this epidemic is not over," warns Dr. Helene Gayle, HIV prevention chief at the Centers for Disease Control.

REDIRECTION. Far from it. New data from the CDC show that, while deaths from AIDS slowed for the first time in 1996 and new infections have dropped from a peak of 100,000 annually, an estimated 40,000 Americans continue to become infected each year. Globally, the story is far grimmer. Some 40 million people around the world have been infected by the virus, which strikes an additional 16,000 every day. In nations such as Botswana and Zimbabwe, HIV lurks in up to 25% of youth and adults. And the vast majority of victims can't afford the current $1,000 per month for the new drugs—or even the lower prices that companies such as Glaxo Welcome PLC and Bristol-Myers Squibb Co. have agreed to charge in developing nations. What's desperately needed, argues Dr. Peter Piot, head of the U.N.'s AIDS effort, is a redirection of world resources to prevention efforts and treatments for the hardest-hit areas.

The continued spread of the vi ic is especially frustrating to p health officials because they no how to rein it in. In one of the v few shining success stories, a a educational effort combined w condom distribution dramatica AIDS rates in Thailand—though re budget cuts threaten the progra Zimbabwean project that Stanfo versity AIDS expert David A. K stein will describe in Geneva, b tory workers were trained to i their peers about AIDS. The effor fection rates by one-third. And U.S., studies by James G. Kah University of California at San cisco show that prevention str such as intensive counseling, ne changes, and treatment for dru tion cost $5,000 to $40,000 per averted. That's a tremendous a

MIXED PICTURE IN GENEVA

What's on the agenda at the 12th World AIDS Conference

HIV MAP: *Sodroski sees a potential weak spot*

PLUSES

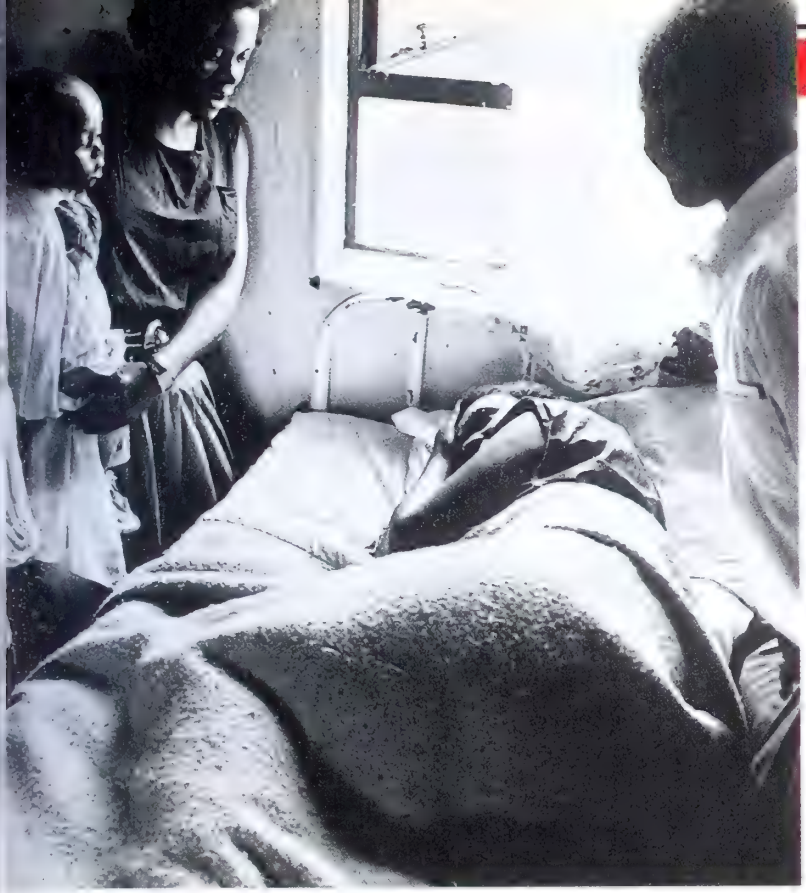
▶ Researchers air tantalizing reports of European patients who keep the virus in check even after ending therapy with hydroxyurea and other drugs.

▶ Scientists find more variations of cell receptors that protect people against the AIDS virus. Drugs aimed at mimicking this natural protection work in the test tube.

MINUSES

▶ Reports show that about ... of patients on AIDS drugs ... keep viral levels low. No or knows when or if these pat ... will eventually get sick.

▶ Scientists are finding str ... of the virus resistant to all current drugs. Cases of transmission of these resist ... viruses are raising concern.



red to the costs of herapies, especially addiction treatment ays off big in de- d crime and higher rment.

ed, prevention alone end the epidemic in S. in 10 years, many s believe. The prob- that Congress contin- block everything from exchanges and sex-education pro- to condom ads. "We know what's e, and we have the money," says . Des Jarlais, AIDS-prevention ex- . Beth Israel Medical Center. "We n't have the political will." And r does the rest of the world. In countries, even talking about sex o. So at Geneva, many scientists sisting that the developed world ackle the epidemic globally.

ICATIONS. Geneva will offer up- on treatments and basic science. s front, recent developments have ed the euphoria of just two years hen new drug cocktails raised for actual cures. On one hand, nce members will hear tantalizing tal reports from Italy and France ients who appear to be keeping rus in check even after stopping ent. Scientists are also finding ce that holding viral levels down rugs allows the immune system to e back, at least partly.

THE HARDEST HIT

In parts of Africa, HIV lurks in 25% of youth and adults–and the vast majority have no access to effective treatment

On the other hand, it's possible that the immune system may be permanently plagued by crucial gaps. "That's one of the most important questions facing us now," says researcher Dr. Michael M. Lederman at Case Western Reserve University. "Even after a year of therapy, the immune system is still not normal." The result may be new complications. One worrisome trend to be aired in Geneva is an unexpected rise in lung cancer.

What's more, the new drugs aren't holding viral levels down dramatically in up to half of patients. "My fear is that the treatment will fail in these people," says Lederman. In the meantime, such incomplete viral suppression could speed development of resistant viruses. Indeed, San Francisco General Hospital researchers have documented a case of transmission of an HIV strain capable of foiling all current drugs. And despite hype from pharmaceutical companies in Geneva, AIDS activists warn, progress in developing additional weapons has been disappointing. "One of the messages for people who have failed treatment is that they will have to hang on with piano wire and glue, because the near-term drug pipeline is pretty thin," says Martin Delaney, founding director of Project Inform, an AIDS treatment-and-advocacy group in San Francisco.

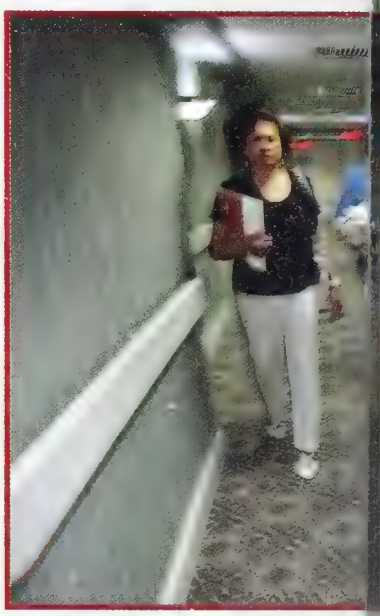
If today's AIDS patients can hold on long enough, however, basic science will find new ways to attack the virus. In mid-June papers published in *Science* and *Nature*, for example, a team led by Joseph G. Sodroski of Harvard University's Dana-Farber Cancer Institute and Wayne A. Hendrickson of Columbia University reported that it has puzzled out the three-dimensional shape of a protein called gp120, the "key" that HIV uses to unlock the door to cells. In an elaborate process, viral gp120 first attaches to a docking port, or receptor, on the target cell called CD4. Then, the combined gp120/CD4 complex binds to a second cell receptor. That, in turn, enables the virus to penetrate and infect the cell.

"STEALTH BOMBER." Sodroski and Hendrickson found that the virus is even more cunning than scientists had thought. In what Sodroski describes as a "stealth bomber" approach, HIV coats gp120 with sugar molecules to hide itself from the immune system. What's more, the protein has dangling loops that act like umbrellas to shield its most vulnerable parts from the body's defenses. Both features help explain how the virus can evade the immune system—and why vaccines based on the gp120 protein have failed.

But the scientists also found a potentially vulnerable spot. One of the sections that gp120 uses to bind to CD4 is a deep pocket in the protein. "It looks like a very attractive place to target with drugs," says Sodroski. A drug capable of filling the pocket might be able to prevent the virus from binding to and infecting cells. Moreover, better vaccines might be able to prod the immune system into making its own "smart bombs"—antibodies that could also home in on the vulnerable region. Sodroski is already working with SmithKline Beecham PLC on possible drug candidates. Another promising development comes from Durham (N.C.) startup Trimeris, where a peptide that blocks the next step in HIV's entry into cells is about to enter Phase II clinical trials.

Unfortunately, most drugs based on the new discoveries are years away. And an effective vaccine probably won't be ready for at least a decade. That's why prevention is so crucial. The Geneva meeting will offer plenty of evidence that science and public-health researchers already know how to fight the spread of the virus. But until governments get serious, the HIV clock will keep ticking at the relentless pace of 10 new infections every minute.

By John Carey in Washington



EDITED BY AMY DUNKIN

HOMES FOR SENIORS WHERE THE LIVING IS EASIER

ELDER CARE

Christine Lawson was 76 and a widow when she opted for a lifestyle that many her age are choosing. She sold her house in St. Petersburg, Fla., and moved to a nearby assisted-living complex. Home today is elegant Lake Seminole Square, where Lawson, now 84, has a two-bedroom apartment and pays $1,600 in monthly fees. Unlike life in a typical Florida condo development, she has easy access on the premises to prepared meals, wellness programs, an emergency call system, and a nurse.

More important to Lawson is her contractual guarantee that she'll get care no matter how disabled she becomes. Should she no longer be able to live independently, she'll be able to transfer to a smaller unit on the grounds and get help with medications, bathing, and meals. If she needs a nursing home, Seminole Square operates one nearby where residents in most cases can stay even if they run out of money. That gives peace of mind, Lawson says, noting: "I'd be among friends."

If you're considering assisted living for yourself or aging parents, Lawson's lifestyle has appeal. For older people of sound mind but not always sound body, assisted living offers a middle way between managing alone and depending on a nursing home. The concept is catching on fast. About 25,000 facilities now serve some 1 million well-heeled residents, says the Assisted Living Federation of America (ALFA), a trade group. The demographics have drawn big, publicly traded outfits, including Marriott and Sunrise Assisted Living (page 90). Religiously affiliated no-for-profits, such as American a Homes of the We Kendal Corp., a Qual terprise, are also activ

Before you sign up o sisted living, you n take a sober look at v involved. Advocates elderly caution that ing can play on emoti

What to Ask Before You Sign

- Does the facility guarantee care for as long as you live?
- Is it certified by the Continuing Care Accreditation Committee?
- Does it have a reserve fund to help ensure delivery of care over the long term?
- Is there special care for Alzheimer's patients?
- What specific services are supplied under the categories of grooming, eating, bathing, and transportation?

CHECKLIST *Touring the Kapson Senior Quarters facility in Lynbrook, N.Y. Make sure that floors are nonskid, shelves easy to reach, and lighting and temperature are suitable*

, difficult financial and questions. Says Bruce y, an attorney with the an Association of Re- Persons (AARP): "Pro- use language that sug- freedom of choice, ; self-autonomy, priva- security. It's certainly r some assisted-living s. The question is, do s that don't fulfill those es get a free ride?"

sted living comes in a ng array of formats— ors and providers can't gree on a definition of m. Seminole Square is nuing care retirement nity (CCRC) and repre- he top tier of the in- Its 365 independent- esidents have resources ond Social Security and n checks: Lawson had ve a net worth of $1 before her application was accepted; newer residents have just had to prove sufficient resources to cover fees. That generally means at least $200,000 in assets.

LOW FEES. Typically, CCRCs require up-front payments of $50,000 to $200,000 to help pay for long-term care, plus $1,200 to $1,500 in monthly fees to cover housing and maintenance. "A CCRC is a community that has insured itself for [residents'] future health care," says David Cole, continuing care director of the American Association of Homes & Services for the Aging, a trade group. Even so, experts advise buying separate long-term-care insurance to defray nursing-home costs that threaten individual resources. Seminole Square residents who graduate to the nursing home pay about $110 a day.

CCRCs vary widely. Some are rentals, with lower entry fees; the newest are full-ownership condos. Seminole Square is one of the latter—with a twist. Lawson holds the deed to her condo, but has signed an agreement allowing the provider exclusive repurchase rights once she moves out or dies. She or her heirs will receive 50% of her initial investment.

Less comprehensive than CCRCs are freestanding independent complexes. Their residents receive meals, medical services, and light assistance as part of their contracts. No up-front payments are made, and fees average about $2,000 a month. But residents lack the option to "age in place." Once they require nursing home care, they must move.

In choosing an assisted-living facility, ask yourself whether you want a home where you can live out your days—and if you can afford it. Then focus your search. Finding facilities is easy: ALFA provides a state-by-state listing. And newspapers are packed with ads.

When you visit a complex, expect a marketing representative to show you the grounds and model apartments. Pay close attention to staff-resident relationships. "When I'm taken on a tour by an administrator and she barely acknowledges a resident in the hallway, that's a red flag," says ALFA President Karen Wayne. Her group provides a checklist of criteria: Are prospective applicants free to talk to residents? Is the decor tasteful and homelike? Are apartment floors nonskid?

Once the facility passes a surface inspection, it's time to

Assisted Living

ICAN ASSN. OF HOMES VICES FOR THE AGING

75-9253, www.aahsa.org
shes free pamphlet on r care options. Also pub- The Continuing Care Re- ent Community: A Guide- for Consumers *($10-15), able at 800 508-9442.*

AMERICAN BAR ASSN. COMMISSION ON LEGAL PROBLEMS OF THE ELDERLY

202 662-8690,
www.abanet.org/elderly
Offers The ABA Legal Guide for Older Americans *($13), which includes sections on assisted living.*

ASSISTED LIVING FEDERATION OF AMERICA

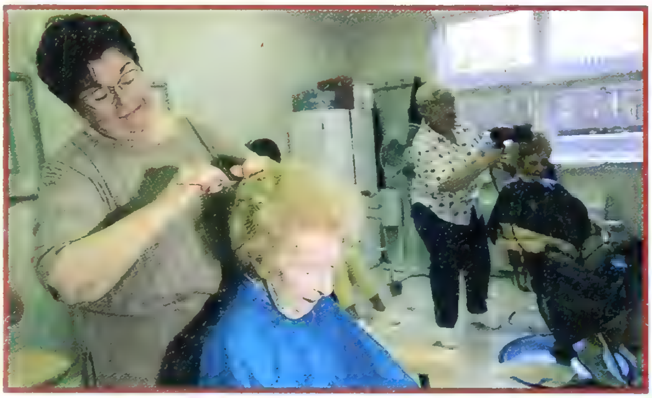
703 691-8100, www.alfa.org
Offers free pamphlet, Assisted Living Guide & Checklist, *and a listing of member facilities by state; also publishes industry magazine,* Assisted Living Today

NATIONAL ACADEMY OF ELDER LAW ATTORNEYS

520 881-4005, www.naela.org
A directory ($25) lists attorneys who can review assisted-living contracts; also has free brochure: Questions and Answers When Looking for an Elder Law Attorney.

delve deeper. If you're interested in a CCRC, check if it's accredited by the Continuing Care Accreditation Commission. This industry self-regulatory group watches financial operations closely—a particular concern to residents who have paid big up-front fees.

Call your state commission on aging or attorney general's office to inquire about complaints. Then hire a good elder-care lawyer and review the contract line by line. AARP lawyers say the best contracts clearly spell out personal services. One AARP-endorsed contract defines "grooming" as helping residents shave, brush their teeth or clean dentures, comb their hair, and, on a scheduled basis, wash and dry hair as well. Watch out for statements such as "service level fee will be subject to change as resident's condition changes." If a contract says transportation is provided, check if that means only one trip a week to the store.


NO TRAVEL *On-premises hair salons are common*

Residents also must grapple with the future, uncomfortable as that may be. As elder-care attorney John Kearns III of Hartford says: "I have never had a client say, 'I want to go to a nursing home.'" Yet applicants should know the score: To what degree will the facility allow you to age in place? If you're likely to develop Alzheimer's disease, is there a special wing to serve you? Can you stay in your apartment if you become incontinent? "People are really sold on the idea that they can move to this place and stay there," says AARP's Vignery. "It's not clear whether that's going to happen, either in terms of contract law or regulation."

Regulation in fact, re[...] scarce: 29 states don't [...] use the term "assisted l[...] yet, according to the N[...] al Academy for State H[...] Policy. Other states don[...] tinguish between assist[...] ing facilities and small—[...] times, deficient—boar[...] care homes for recipien[...] pendent on governmen[...] While the largest assist[...] ing providers have been [...] active in Florida, Texa[...] California, states award[...] highest marks for fl[...] "age in place" policie[...] Hawaii, Kansas, Oregon[...] Jersey, and Vermont.

That list will likely [...] with the 85-and-up pop[...] expected to double by [...] For seniors like Ch[...] Lawson, with resour[...] back them up, the exp[...] number of providers [...] healthy trend. *Joan[...]*

SMART MONEY

ASSISTED-LIVING STOCKS: JUST TAKING A BREATHER

Investors have a lot to like about the business of providing assisted-living housing. A rapidly aging population is fueling demand, the industry is lightly regulated, and residents pay the bills themselves, reducing the risk that comes with government or insurance reimbursement. "It is the only place in health care where you have market forces running the business," says Ray Lewis, who covers the industry for Schroder & Co.

But those positive themes have taken a backseat recently to concerns about overcapacity and the quality of earnings. Following a runup of more than a year, many stocks have lost 20% to 30% of their value in the past two months. Investors fled the group after bellwether Sunrise Assisted Living's first-quarter earnings announcement fed their fears about oversupply. Sunrise's stock has stumbled nearly 40%, to 28¾ on June 22. One problem: Sunrise's new facilities have been filling up slower than in the past because they are located in areas, such as Atlanta, where a great deal of new capacity has come on line all at once.

The upshot: Many assisted-living stocks are cheap relative to their anticipated growth rates. Sunrise, for example, should still see earnings rise 40% a year over the long term. But it's trading at only 19 times 1999 operating earnings, calculates Jim Kumpel, an analyst with Raymond James. Scott Estes of NationsBanc Montgomery Securities issued a "buy" rating on Sunrise June 17, citing its strong management, emphasis on Alzheimer's care, and discounted stock price. Lewis, meanwhile, has a 12-month price target [...] for American Retiremen[...] now at 19⁹⁄₁₆; 43 for Alte[...] tive Living Services, no[...] 27¹¹⁄₁₆; and 27 for Assiste[...] Living Concepts, now a[...]

One stock that has h[...] steady is Brookdale Li[...] Communities. Kumpel [...] that's because it is gro[...] by acquisition, rather t[...] building properties, and [...] not been taken down o[...] concerns about oversup[...]

Estes thinks what co[...] most for assisted-living [...] stocks is strong manag[...] and superior facilities. [...] lysts expect regulation [...] the industry, now done [...] by state, to step up. B[...] stricter rules could ben[...] the best-run companies[...] They'll easily meet ne[...] standards and gain an [...] tunity to buy smaller [...] that can't upgrade. Est[...] likes CareMatrix on th[...] score. Oversupply and [...] tions about earnings m[...] continue to dog the ind[...] But long-term trends [...] its favor. *Ame[...]*

Bargain-Hunting Time?

COMPANY	PRICE*	52-WEEK HIGH	P/E**
ALTERNATIVE LIVING SERVICES (ALI)	27¹¹⁄₁₆	35¼	30
ASSISTED LIVING CONCEPTS (ALF)	17½	22¼	29
BROOKDALE LIVING COMMUNITIES (BLCI)	26¾	30¼	36
CAREMATRIX (CMD)	25⅞	35	27
SUNRISE ASSISTED LIVING (SNRZ)	28¾	46¾	29

*June 22 **Estimated 1998 earnings DATA: BLOOMBERG FINANCIAL MARKETS

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ou're a fan of cure Chicago sman Washboard but live in rural nt, your chances of g the recording you in a local shop may t to nil. But thanks to ternet, you don't have ve hours to Boston to . Instead, you can shop he growing number of stores offering every- from bebop to ven at discounts of up

e cyber- ores, online retailers list ollections of almost nteeing you ction. CD- oasts up- of a r million ings in its g, whereas Records 160,000 on- able), dou- hat it of- hrough its t walk-in superstores. at's more, v and its

ONLINE

competitors offer thousands of selected audio clips, although most are annoyingly short—30 seconds or less—because of copyright restrictions. And if you don't find your heart's desire at CDNow or Amazon.com, click on the Yahoo! search engine (www.yahoo.com), type in "music online shopping," and you will get a directory of nearly 200 sites, many dealing in specific genres such as African, Danish, or Latin music.

For sheer ease of use, CDNow stands out from the pack, with a clean design and the smartest search capabilities. N2K's Music Boulevard has a unique feature: The site automatically displays the cover art for many titles it has by an artist you select. The only problem is it can take more than a minute to download pages for such prolific artists as Frank Sinatra.

Surprisingly, the clumsiest site belongs to Amazon.com, the pioneer online bookseller that opened its music store in June. When I was shopping for CDs, after each selection Amazon would return me to the home page for its sister book service. More than once I ran a search for an artist before realizing that I had defaulted to the book section and Amazon actually was looking through its book catalog. Worse, while other sites showed a running tally of how much my spree would cost, Amazon told me the final tab only after I initiated a purchase—when I was a click away from having the order shipped.

WORST OFFENDER. The online services all share one shortcoming: mediocre search capabilities. The problems are most extreme in classical music, given that most classical albums don't have titles. The worst offender is Music Boulevard, which allows you to search by composer, orchestra, performer, and title—but not by work.

For some audiophiles, the biggest consideration is price. To test the economics of buying CDs online, BUSINESS WEEK priced a basket of nine CDs at the major sites (table). CD Universe offered the package, which lists for nearly $350, for about $285 with shipping, compared with $307 at Amazon.com and $320 at CDNow.

If you live in a big city, you can probably get what you're looking for through a music superstore. But for small-town residents or people with an urge to order jazz singer Blossom Dearie's latest CD without leaving home, the Web services come in handy.

Dean Foust

Where to Buy CDs Online

SITE	NUMBER OF TITLES	AUDIO SAMPLES	PRICE*
AMAZON.COM www.amazon.com	100,000	225,000	$300.98
CDNOW www.cdnow.com	250,000	315,000	$320.18
CD UNIVERSE www.cduniverse.com	200,000	150,000	$285.28
MUSIC BOULEVARD www.musicblvd.com	200,000	150,000	$295.70
TOWER RECORDS www.towerrecords.com	160,000	45,000	$319.06

*As of June 19 and 20 for these nine titles, including shipping: Miles Davis, *Kind of Blue*; Ray Charles, *Genius & Soul–50th Anniversary*; Frank Sinatra, *Very Good Years*; Johnny Cash, *Man in Black 1963-1969*; *Titanic* soundtrack; Webb Pierce, *King of the Honky Tonk*; Sarah McLachlan, *Fumbling Towards Ecstasy*; Natalie Merchant, *Tigerlily*; Parliament, *Tear the Roof Off 1974-1980*. DATA BUSINESS WEEK

FUND WATCH

MIDDLE GAME. If you're reluctant to brave the small-cap minefield, there is an alternative: funds that focus on midsize companies. The rationale is that these businesses —capitalized at $500 million to $6 billion—have already made it through the risky small-cap phase but haven't grown so huge that growth has slowed. "We pick them up when they are heading for their next stage of growth," says Christopher McHugh, who manages TIP: Turner Midcap Growth Fund.

Only 18 months old, McHugh's $23 million no-load fund has gained 40% in the 12 months ended June 19, putting it in the top 3% of funds in its category—and well ahead of the Standard & Poor's 500 stock index (up 24%) and the Russell Midcap Growth Index (up 19%). McHugh limits risk by diversifying across sectors, always keeping the same broad sector weightings as his midcap benchmark. He also stays fully invested and keeps about 100 stocks in his portfolio.

With 17% of its assets in technology, the fund has loaded up on Net names, such as Amazon.com, Yahoo!, Excite!, Lycos, and SportsLine USA. Several are stocks that got too large for Turner's small-cap fund. Strong same-store sales stats in April and May also drew McHugh to retailers, such as Abercrombie & Fitch, Linens 'n Things, and Dollar Tree Stores.

Amey Stone

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10 GTE Internetworking
11 Imation
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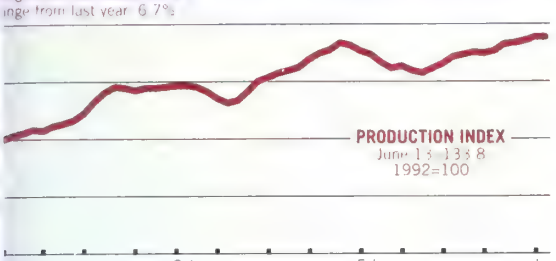
isiness Week Index

DUCTION INDEX

inge from last week 0.0%
inge from last year 6.7%



June 1997 | Oct. 1997 | Feb. 1998 | June 1998

ndex is a 4-week moving average

oduction index was flat for the week ended June 13. The unaveraged ell 1%, to 133.6, from 134.9. Part of this dip can be blamed on the at General Motors Corp. But other components besides auto and truck tion were down as well. Electricity was off by 3.6%, with reduced in the New England and Mid-Atlantic regions. Steel production was wn, with the rate of utilization the lowest since last August. Coal and ght traffic also fell. Only lumber and oil posted gains.

Data c Dec. opyright 1998 by The McGraw-Hill Companies

DING INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
PRICES (6/19) S&P 500	1100.65	1098.84	22.5
RATE BOND YIELD, Aaa (6/19)	6.49%	6.52%	-11.5
SUPPLY, M2 (6/8) billions	$4,182.9	$4,187.7r	7.2
L CLAIMS, UNEMPLOYMENT (6/13) thous.	327	314r	-5.2
GAGE APPLICATIONS, PURCHASE (6/19)	274.6	262.1	33.0
GAGE APPLICATIONS, REFINANCE (6/19)	1,406.2	1,209.6	254.7

es: Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage Assn. (Index: March 16, 1990=100)

EREST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
AL FUNDS (6/23)	5.36%	5.55%	5.39%
ERCIAL PAPER (6/23) 3-month	5.50	5.50	5.63
FICATES OF DEPOSIT (6/24) 3-month	5.60	5.60	5.66
MORTGAGE (6/19) 30-year	7.08	7.11	7.81
TABLE MORTGAGE (6/19) one-year	5.83	5.79	5.87
(6/19)	8.50	8.50	8.50

es: Federal Reserve, HSH Associates, Bloomberg Financial Markets

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (6/20) thous. of net tons	2,067	2,190#	-3.5
AUTOS (6/20) units	98,384	113,800r#	-26.3
TRUCKS (6/20) units	101,566	125,585r#	-22.0
ELECTRIC POWER (6/20) millions of kilowatt-hrs.	70,713	64,274#	5.5
CRUDE-OIL REFINING (6/20) thous. of bbl./day	15,443	15,507#	2.6
COAL (6/13) thous. of net tons	21,279#	21,581	1.9
LUMBER (6/13) millions of ft.	494.9#	494.9	-4.1
RAIL FREIGHT (6/13) billions of ton-miles	27.5#	27.8	4.6

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPA1, SFPA2, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (6/24) $/troy oz.	293.850	290.000	-13.2
STEEL SCRAP (6/23) #1 heavy, $/ton	135.50	134.50	-2.2
COPPER (6/19) ¢/lb.	77.7	80.0	-37.4
ALUMINUM (6/19) ¢/lb	63.5	64.0	-16.0
COTTON (6/20) strict low middling 1-1/16 in., ¢/lb.	73.04	72.11	2.7
OIL (6/23) $/bbl.	14.16	11.94	-23.3
CRB FOODSTUFFS (6/23) 1967=100	240.00	240.14	-0.8
CRB RAW INDUSTRIALS (6/23) 1967=100	296.84	297.83	-11.5

Sources: London Wednesday final setting, Chicago market, *Metals Week*, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (6/24)	141.13	137.55	114.03
GERMAN MARK (6/24)	1.80	1.79	1.73
BRITISH POUND (6/24)	1.67	1.67	1.66
FRENCH FRANC (6/24)	6.04	5.99	5.82
ITALIAN LIRA (6/24)	1774.2	1759.0	1683.5
CANADIAN DOLLAR (6/24)	1.47	1.46	1.39
MEXICAN PESO (6/24)	8.932	8.875	7.940
TRADE-WEIGHTED DOLLAR INDEX (6/24)	113.5	112.9	103.4

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense ent. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

THE WEEK AHEAD

OME SALES

y, June 29, 10 a.m.EDT ▶ New homes old at an annual rate of 875,000 in own from April's 888,000 pace, says dian forecast of Standard & Poor's unit of The McGraw-Hill Companies.

MEETING

ay, June 30 ▶ The Federal Reserve s Federal Open Market Committee will o set monetary policy. No change in t rates is expected. The meeting con- on July 1.

UMER CONFIDENCE

ay, June 30, 10 a.m.EDT ▶ The Confer- Board's index of consumer confidence likely stood at 135 in June, little changed from 135.2 in May. Household economic optimism remains quite high.

NAPM SURVEY

Wednesday, July 1, 10 a.m.EDT ▶ The National Association of Purchasing Management's business index probably slipped to 51% in June, from 51.4% in May. The fallout from the Asian crisis is hitting the U.S. industrial sector.

LEADING INDICATORS

Wednesday, July 1, 10 a.m.EDT ▶ The Conference Board's index of leading indicators was probably unchanged in May, after rising 0.1% in April.

CONSTRUCTION SPENDING

Wednesday, July 1, 10 a.m.EDT ▶ Construction spending probably increased 0.4% in May, says the S&P MMS forecast, on top of a 0.8% gain in April.

EMPLOYMENT

Thursday, July 2, 8:30 a.m.EDT ▶ Nonfarm payrolls likely increased just 206,000 in June, a smaller gain than the 296,000 added in May. June's jobless rate likely edged up to 4.4% from May's 4.3%.

FACTORY INVENTORIES

Thursday, July 2, 10 a.m.EDT ▶ Manufacturers likely increased their inventories by 0.2% in May, on top of a 0.5% gain in April.

This Week, Online

Business Week presents frequent live conferences and chats on America Online–your opportunity to ask questions about timely topics.

BusinessWeek ONLINE

Sunday

Want your product to show up in a movie or TV show? Eric Dahlquist Sr. of Vista Group knows how to swing it, and he'll tell all in this BW Enterprise chat, presented in conjunction with AOL's WorkPlace Weekend program.
June 28
9 p.m. EDT

Thursday

In this crazy market, it's harder than ever to decide what stocks to buy, sell, or hold—but Sam Stovall of Standard & Poor's will have expert answers for your questions in another of our weekly investment conferences. **July 2**
9 p.m. EDT

AOL keyword: BW Talk

Transcripts of all conferences are available for downloading from the BW Online area on AOL soon after each event.

For a free trial diskette including 50 free hours on AOL, call 1-800-641-4848 and mention Business Week.

AMERICA Online

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This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. Companies listed only in tables are not included.

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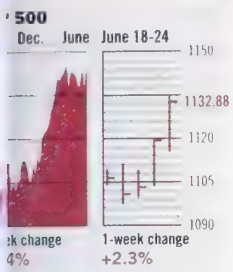
vestment Figures of the Week

KS

500



ek change
4%

1-week change
+2.3%

IENTARY

erally dour week in the fi-
al markets turned upbeat
ne 23 and 24, when the
t staged a rousing rally.
ow Jones industrial aver-
limbed over 200 points,
g on June 24 at 8923.9.
agreement to buy Tele-
unications Inc. drove the
ts on June 24, while a
n computer and software
; encouraged traders on
23. The rally came after
ow fell 100 points on
19, on concerns that U.S.
gs may suffer if Japan's
continue.

U.S. MARKETS	Latest	% change Week	Year
Dow Jones Industrials	8923.9	1.1	16.0
NASDAQ Combined Composite	1877.8	5.7	29.8
S&P MidCap 400	357.5	1.3	24.5
S&P SmallCap 600	188.8	1.7	18.8
S&P SuperComposite 1500	240.7	2.2	26.8

SECTORS	Latest	% change Week	Year
Bloomberg Information Age	352.3	5.2	30.8
S&P Financials	136.3	2.4	33.4
S&P Utilities	244.3	–0.2	24.7
PSE Technology	343.7	5.0	19.9

FOREIGN MARKETS	Latest	% change Week	Year
London (FT-SE 100)	5804.9	–0.5	25.1
Frankfurt (DAX)	5779.9	1.2	52.2
Tokyo (NIKKEI 225)	15,123.2	2.8	–26.9
Hong Kong (Hang Seng)	8296.8	3.7	–44.9
Toronto (TSE 300)	7264.4	1.0	11.5
Mexico City (IPC)	4378.3	0.9	–0.4

FUNDAMENTALS	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.40%	1.43%	1.66%
S&P 500 P/E Ratio (Last 12 mos.)	26.3	25.7	22.8
S&P 500 P/E Ratio (Next 12 mos.)*	21.7	21.1	18.5
First Call Earnings Revision*	–1.27%	–1.13%	–1.30%

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 200-day average	1017.5	1012.9	Positive
Stocks above 200-day average	44.0%	44.0%	Neutral
Options: Put/call ratio	0.61	0.73	Neutral
Insiders: Vickers Sell/buy ratio	2.18	2.35	Neutral

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS	Last month %		Last 12 months %
Homebuilding	16.0	Specialty Appar. Retailers	113.5
Computer Software	15.9	Broadcasting	78.6
Drug Chains	11.7	Homebulding	76.1
Specialty Appar. Retailers	11.6	Automobiles	74.9
Personal Loans	10.8	Airlines	71.6

WORST-PERFORMING GROUPS	Last month %		Last 12 months %
Machine Tools	–19.9	Metals	–44.5
Oil & Gas Drilling	–17.4	Gold Mining	–28.2
Gold Mining	–15.8	Shoes	–25.2
Hospital Management	–15.6	Leisure Time	–21.6
Forest Products	–14.9	Hospital Management	–20.3

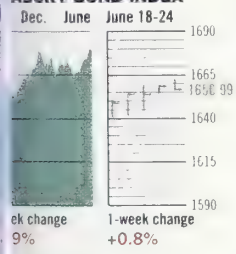
BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness	Price	1-month change
Citicorp	149 1/8	–3 3/4
IBM	111 3/4	–9 1/4
Wells Fargo	353 1/4	–20 3/8
J.P. Morgan	118 5/16	–11 3/4
Merrill Lynch	91 1/2	–9/16
GTE	57 1/2	–1 1/2

Decline ahead? Stocks with most significant selling on price strength	Price	1-month change
Intel	75 1/4	9/16
WorldCom	47 15/16	2 3/16
Cisco Systems	86 7/8	10 7/8
Dell Computer	93 1/8	9 3/16
Microsoft	100 3/4	17 1/8
Tellabs	69 3/8	3 15/16

REST RATES

ASURY BOND INDEX



ek change
9%

1-week change
+0.8%

oomberg Financial Markets

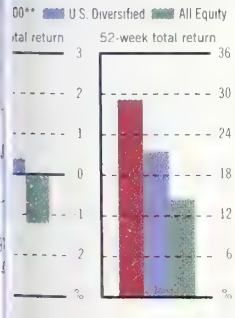
KEY RATES	Latest week %	Week ago %	Year ago %
MONEY MARKET FUNDS	5.09	5.10	5.15
90-DAY TREASURY BILLS	5.02	5.23	5.07
6-MONTH BANK CDS	5.06	5.07	5.19
1-YEAR TREASURY BILLS	5.39	5.44	5.67
10-YEAR TREASURY NOTES	5.46	5.54	6.45
30-YEAR TREASURY BONDS	5.66	5.74	6.74
LONG-TERM AA INDUSTRIALS	6.27	6.32	7.23
LONG-TERM BBB INDUSTRIALS	6.73	6.79	7.64
LONG-TERM AA TELEPHONES	6.61	6.65	7.47

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond		30-yr. bond	
	Latest week	Last week	Latest week	Last week
GENERAL OBLIGATIONS	4.39%	4.45%	4.93%	4.98%
PERCENT OF TREASURIES	80.45	80.54	87.19	86.83
TAXABLE EQUIVALENT	6.36	6.45	7.14	7.22
INSURED REVENUE BONDS	4.56	4.58	5.17	5.17
PERCENT OF TREASURIES	83.57	82.90	91.44	90.14
TAXABLE EQUIVALENT	6.61	6.64	7.49	7.49

UAL FUNDS



orningstar, Inc.

EQUITY FUNDS

Leaders: Four-week total return	%	Laggards: Four-week total return	%
ProFunds UltraOTC Investor	16.5	Pioneer India C	–25.5
Amerindo Technology D	15.4	Eaton Vance Grtr. India A	–22.2
Managers Capital Apprec.	14.0	Guinness Flgt. Asia Sm. Cap	–20.8
Transamerica Prem. Sm. Co.	13.6	Newport Greater China A	–20.2
PBHG Select Equity	13.0	Matthews Pacific Tiger I	–19.9

Leaders: 52-week total return	%	Laggards: 52-week total return	%
Delaware Aggressive Gr. A	57.3	Matthews Korea I	–70.0
Weitz Hickory	56.1	Lex. Crosby Sm. Cap Asia	–64.1
Fidelity Select Retailing	55.3	Morg. Stan. Inst. Asia Eq. A	–62.0
Flag Investors Communics. A	51.9	Montgomery Emerg. Asia R	–61.8
Fidelity Select Brokerage	50.9	Morgan Stan. Asian Grth. B	–61.1

EQUITY FUND CATEGORIES

Leaders: Four-week total return	%	Laggards: Four-week total return	%
Large-cap Growth	4.3	Pacific/Asia ex-Japan	–15.9
Communications	3.4	Precious Metals	–13.4
Mid-cap Growth	3.1	Diversified Pacific/Asia	–10.9
Technology	3.0	Diversified Emerging Mkts.	–10.3
Utilities	2.4	Natural Resources	–6.2

Leaders: 52-week total return	%	Laggards: 52-week total return	%
Communications	35.0	Pacific/Asia ex-Japan	–53.1
Financial	31.4	Diversified Pacific/Asia	–42.7
Large-cap Growth	29.7	Precious Metals	–37.3
Europe	27.4	Diversified Emerging Mkts.	–31.8
Utilities	25.7	Japan	–29.0

re as of market close Wednesday, June 24, 1998, unless otherwise indicated. Industry clude S&P 500 companies only. Fundamentals, technical indicators, Bloomberg money flow analysis, and mutual fund returns are as of June 23, 1998. For a more detailed explanation, write or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

CHARTS BY ALFRED I. MINWA BA

AT&T AND TCI: UNBLOCKING THE I-WAY

Monopolists, paid-for politicians, and incompetent regulators are all taking it on the chin with AT&T's purchase of TCI. It's quite a sight to see. In one fell swoop, the merger of America's biggest long-distance phone carrier and its second-largest cable company promises to bring competition, finally, to local phone service. The deal circumvents the Baby Bell monopolies and highlights the failure of the Telecom Act of 1996, which promised competition and produced zip. Most important, AT&T is now in a position to deliver what local phone and cable companies have been unwilling or unable to offer—bandwidth, lots of bandwidth.

The whole promise of Internet access and electronic commerce depends on homes, schools, hotels, and small businesses getting the same kind of broad bandwidth now available to big companies. Anyone using the Net outside the corporate network knows how slow and frustrating it is. Despite rising prices, cable companies have been painfully slow in upgrading their coaxial wires from one- to two-way traffic. Local phone carriers have done little to transform their old copper wires into high-tech carriers of digital information. With cushy monopolies, the Bells and cable companies had little incentive to upgrade.

Until now. The AT&T-TCI deal is a transformative event that can break the logjam and unleash technologies that can bring the Net to everyone. AT&T has the deep pockets to finance the upgrading of TCI's cable system that's needed to pump in bandwidth and bring about fast, two-way Internet service. It can finance much of the expense by offering local service at cheaper rates than the Bells. And when AT&T begins to do all thi the Bells and cable companies will have to compete a prove their own networks (page 24).

The ramifications are massive. First, billions soon spent on fiber-optic cable, routers, and other high-tech ment. The size of the national "upgrade" is big enough ther enliven the high-tech sector of the economy and pr new boost to growth. Then, once families and merchan plugged in with high-speed lines, doing business on the net will take off. Even with slow-mo online connections, are beginning to buy books, CDs, stocks, and cars on t Add the new bandwidth, and E-commerce will zoom.

AT&T must move fast to make its deal pay off. Wire waiting in the wings to boost bandwidth so that it can t data as well as voice. A covey of new broadband satell works is ready to take flight soon. If wireless succe mastering the technology and prices its services low en could undercut all the hardwired providers of Net acc cluding AT&T.

But that's the miracle of market competition. Rarely a marketplace shown so much promise to blow apart s monopolies. Rarely has one deal provided a way t through a legal and regulatory logjam to unfetter ne nologies and new opportunities so quickly. The AT&T-TCI the best kind of merger for the new economy. It boosts spending, increases competition, and lowers prices. If it it may be the deal of the decade.

LET ASIAN MARKETS DO THEIR WORK

If Asian economies were truly market-driven instead of government-directed, they probably would be pulling out of their recessions by now. Instead, government efforts to solve the financial problems behind the Asian crisis are, in many cases, making matters much worse by delaying the painful corrections needed to restart growth.

Take Korea. Seoul recently released a list of 55 companies it wants to fail. Despite the plunge in the won, a huge International Monetary Fund rescue, and a deep recession, banks have continued to bail out Korea Inc. But why is the government and not the marketplace choosing which company lives or dies? Why aren't the banks doing the financial triage? Despite promises, the state continues to dominate the Korean economy. As a result, the financial markets are not clearing and growth stagnates.

Hong Kong, that bastion of free-market capitalism, is beginning to follow in Asia's state-capitalist footsteps. To strengthen a plummeting real estate market, the government just announced it would suspend for nine months a longstanding program of government land sales. Tung Chee-hwa, Hong Kong's new leader, yielded to pressures from real estate tycoons, whose investments contracted 0 the past year.

Bad move. Hong Kong's real estate bubble neede pricked. The faster the market deflates, the faster recover. With the Hong Kong dollar pegged to the US lar, real estate and the stock market are the mech needed to absorb financial shocks. Tung now has int with the free movement of those markets. The res well be renewed pressure to delink and devalue th Kong dollar.

Japan, of course, is suffering the most from gov control. Its seven long years of stagnation largely ste the Ministry of Finance's refusal to have banks disclo bad-loan portfolios, price them, and sell them to in With these bum loans on their books, Japan's banks c to new borrowers. Even calls by the Bank of Japan disclosure go unheeded.

The Pacific Rim is moving into a second year of e decline thanks to the efforts of its politicians and bur to stem the pain. Unless Asia's markets are allowed soon, the anguish could last well into the next cent

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SPIELBERG

How Hollywood's most successful director runs his creative empire

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COVER STORY

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How Steven Spielberg keeps his dream factory churning out a steady stream of blockbusters page 96

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Steven Spielberg has directed 6 of the world's 25 top-grossing films, and, all told, his movies have pulled in an astounding $5 billion worldwide. In addition to co-founding Hollywood's first new studio in 65 years, he has amassed an empire that includes video games, theme parks, even restaurants. How does Hollywood's ultimate mogul keep his dream machine humming?

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So far, Spielberg's new studio hasn't lived up to expectations. But with four movies soon to open, this summer could change all that, big-time

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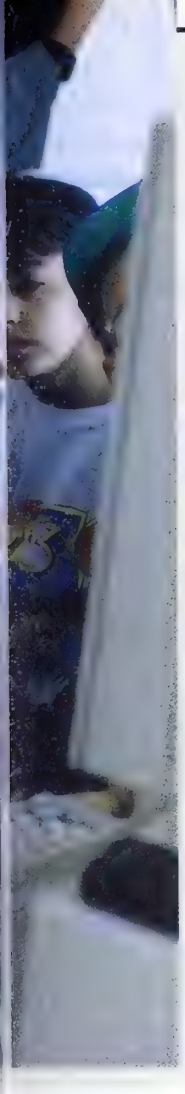

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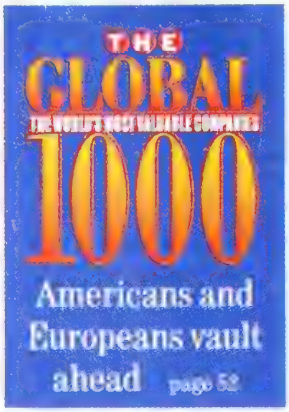

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Up Front

EDITED BY ROBERT McNATT

HONCHOS

AMERICAN LIGHTENS UP

CARTY *faces a union test*

FORMER AMERICAN AIRLINES Chief Executive Bob Crandall was famous for his hot temper and poor relations with labor. Now, successor Don Carty is quietly trying to show that it's a new day at American.

A few weeks ago, the affable Canadian, who became CEO in May, dramatically improved some employee travel benefits, including low-cost passes for their families. Never mind that Crandall originally had slashed the perks with Carty's blessing. Employees say the change of heart was a needed morale-booster. That will help American as it faces union organizing efforts among its gate and reservation agents.

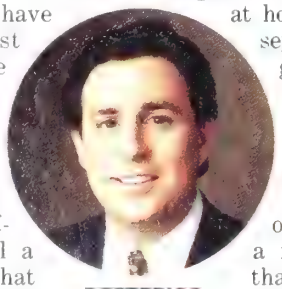
Also, Carty is canning a controversial local ad campaign that blasted a 1997 federal law allowing more flights at Dallas Love Field, eight miles from American's hub at Dallas/Fort Worth International Airport. The company was afraid the change could ultimately weaken its hub. In billboards, bus placards, and mass-mailings, American urged politicians to "Leave Love alone." Now, it admits the high-profile campaign backfired, creating a "cry-baby" image for American.

Last, Carty will begin sending his execs to the Aspen Institute, a leadership-training outfit where the reading list includes Plato—and has little to do with the bottom line. *Wendy Zellner*

THE COMPETITION

A NEW TEAM AT *BUSINESS DAY*

SINCE 1980, PLENTY OF PIN-striped warriors have heard their first report from the financial front from Stuart Varney, the British-accented host of CNN's early-morning *Business Day*. Until a few weeks ago, that is, when Varney quietly retired.



DEFTERIOS

So who replaces him? Cohost Deborah Marchini has been sitting next to a chair filled one week by John Defterios, perhaps the next by another colleague, John Metaxas. But that's over. BUSINESS WEEK has learned that Defterios gets the nod. Vacationing, he couldn't be reached for comment.

We caught up with Varney as he watched the England-Argentina World Cup match at home in New Jersey. Feeling he had gone as far as he could at CNN and tired of that 2:30 a.m. alarm ring, Varney, 49, decided to retire once he learned of a new CNN policy that would have barred a lucrative sideline in public speaking. "It was a combination of those reasons," he says. "We just parted on the best of terms." CNN Executive Vice-President Lou Dobbs agrees, adding: "Whenever he wants to come back, he's more than welcome." *Robert Barker*

TALK SHOW "I believe, and the American people belie that the use of force and the tragic loss of life was wrong.

—President Clinton, in a live telecast in China, describing the reaction to the 1989 Tiananmen Square protests

THE FED

ECONOMISTS NEED NOT APPLY

SO YOU'RE NOT A MASTER of the intricacies of monetary policy? No problem. You still might qualify for a seat on the Federal Reserve Board. Given Chairman Alan Greenspan's deft handling of the economy, the White House sees no need to nominate yet another economist to the seven-member Board of Governors.

CANDIDATES: *Decker and Bessant*

So the short list for spot vacated by S Phillips includes those w the Administration's pr ence for a banker well-v in the 1977 Community vestment Act, a law m to end "redlining," the practice of withholding from poor areas. Critic the Fed hasn't done en to enforce the act.

But whether the W House gets any take another question. It already been turned dov one candidate, Carol who heads community a at Chase Manha Now, the Adm tration is cons ing Mary De head of First C go NBD's comm development ef Another candid Catherine Bes who holds a s post at Nations May the best w win. *Dean*

CHINA SYNDROME

WHEN IN BEIJING, MUM'S THE WORD

IN A REMARKABLE MOMENT during his recent trip to Beijing, President Clinton openly criticized that nation's shoddy human rights record and extolled freedom of speech and political expression. Yet as he spoke, Prudential Relocation International, a cross-cultural executive-training firm, was telling its U.S clients in Beijing to shut up about politics during—and after—Clinton's visit.

In a bulletin issued before the China trip, Prudential, which works with the likes of Alcoa and AlliedSignal, told its U.S. clients in China: "Do not bring up sensitive political topics [or] discuss the U.S. Democratic Party accepting questionable donations from China o nese nationals. Do not c the transfer of U.S. technology to China Tiananmen Square d strations, or the politic plications of President ton's attending cerer there." Prudential Vice dent Noel Miner says such talk would seem

disrespectful an make the C question your edge of their busine ture." Clinton's trip changed his mind, eit other words, when talk politics in China, the le the better. *Marcia St*

Europtimistic

The accords are signed. The rates have been announced. Another half year and trading in euros will commence. So - now that it's really coming - how do you feel about your company's future? ING is optimistic about the euro's arrival. In addition to opening up trade, investment and other cross-border activities, the euro will stimulate financial markets and local economies. As boundaries fade, international financial networks such as ours will be called upon to provide a broader range of expertise. To meet this challenge, ING takes a cross-disciplined approach to all your banking, insurance and asset management needs. Integration, after all, will be the key to success when the clock strikes euro. For more information, visit www.inggroup.com or send an e-mail to: inggroup@inggroup.com.

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Up Front

EATING AND DRINKING

'GET YER RED-HOT–ER–CHEF'S SALADS!'

IT'S JUST NOT A BASEBALL game without vendors selling cold beer, hot dogs, and Cracker Jack, right? Well, all that may become passé after fans at Major League Baseball's All-Star game test a high-tech system to bring the eats to their seats.

Gamegoers will still have to summon the hot dog man, but don't look for a food bin strapped to his shoulders. Instead, attendants will carry handheld computers, into which they'll key orders and credit-card numbers, then zap it all back to the kitchen. A runner will deliver the order. The July 7 game, at Denver's Coors Field, gives Aramark Sports & Entertainment, a Philadelphia-based food-service company, a chance to try out the system. According to Regional Vice-President Timothy Lawler, Aramark will also be able to offer a more upscale menu. Hot dogs will still be for sale. But so will mixed drinks, chef's salads, and grilled mesquite chicken. Everything will be prepared ahead of time, then rushed to the spectator's seat. But the familiar "Beer, here!" cry won't disappear everywhere. Those cybervendors will work only the most expensive seats. *Marcia Stepanek*

I-WAY PATROL

WHEN THE PC RUNS THE HOUSEHOLD

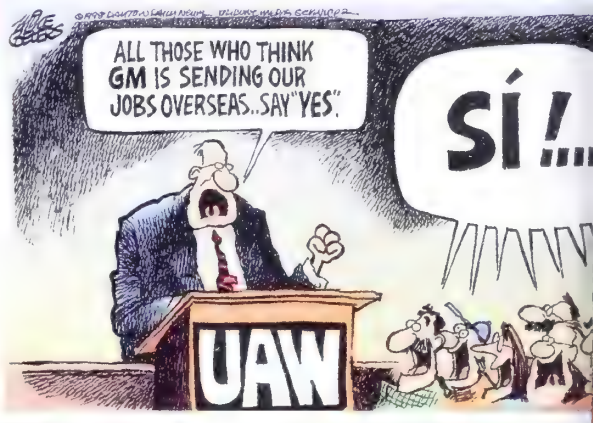
WHY SHOUT UPSTAIRS TO GET Junior to the dinner table? Soon, you may send an E-mail message from your kitchen PC to the one in his bedroom.

As more families become two-or-more PC households—and as more areas get high-speed Internet connections—a market for home networks is emerging. So several high-tech heavyweights—including IBM, Hewlett-Packard, 3Com, and Intel—announced on June 22 that they are forming the Home Phoneline Networking Alliance. By yearend, the group hopes to develop a range of complementary products designed to let home computers talk to one another or share a common printer using existing telephone cables and jacks.

And with networking technology from Tut Systems, another alliance member, the group hopes to make these home connections as speedy as the 10-megabit rate found at the office.

Eventually, home networks will control lighting, heating and air-conditioning, home-security systems, and entertainment equipment as well as PCs. The alliance hopes to develop ways to permit in-house sharing of one high-speed Net connection. Then, maybe you'll be able to do your own "We Interrupt this Program . . ." to summon the kids. *Stephen H. Wildstrom*

DRAWN & QUARTERED

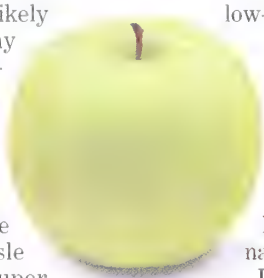


RETAIL TALES

HEY, IT'S GREEN–IT MUST BE HEALTHY

MAKERS OF LOW-FAT SNACKS want you to get your fill of greens—but not the way you might expect.

New marketing research shows that health-conscious consumers are likely to think that any food, from cookies to cheese, is probably good for them as long as it comes in green packaging.



GOOD PACKAGING

Check out the fat-free food aisle at your local supermarket, and you'll see. Two top brands—Snackwell's and Healthy Choice—use green packaging, and the makers of Famous Amos Cookies and Hershey chocolate bars now use green packaging for some lo products. Says Her spokeswoman Natalie B "Green is becoming r nized as a low-fat c Adds Elliot Young, pres of Fort Lee (N.J.) ma ing firm Perception Res Services: "It's a risk n use green. It makes it e for the shopper to distin low-fat items."

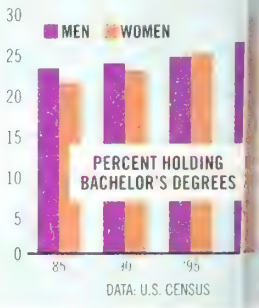
According to er Mark Group in Oak Ill., people ag to 34 are esp likely to green to ima health, ecolog nature.

In fact, gree such an appeal Snackwell's exec they'll soon wrap all of products in green—eve higher-fat products. green-wrapped Frenc be far behind? *Tammy*

THE BIG PICTURE

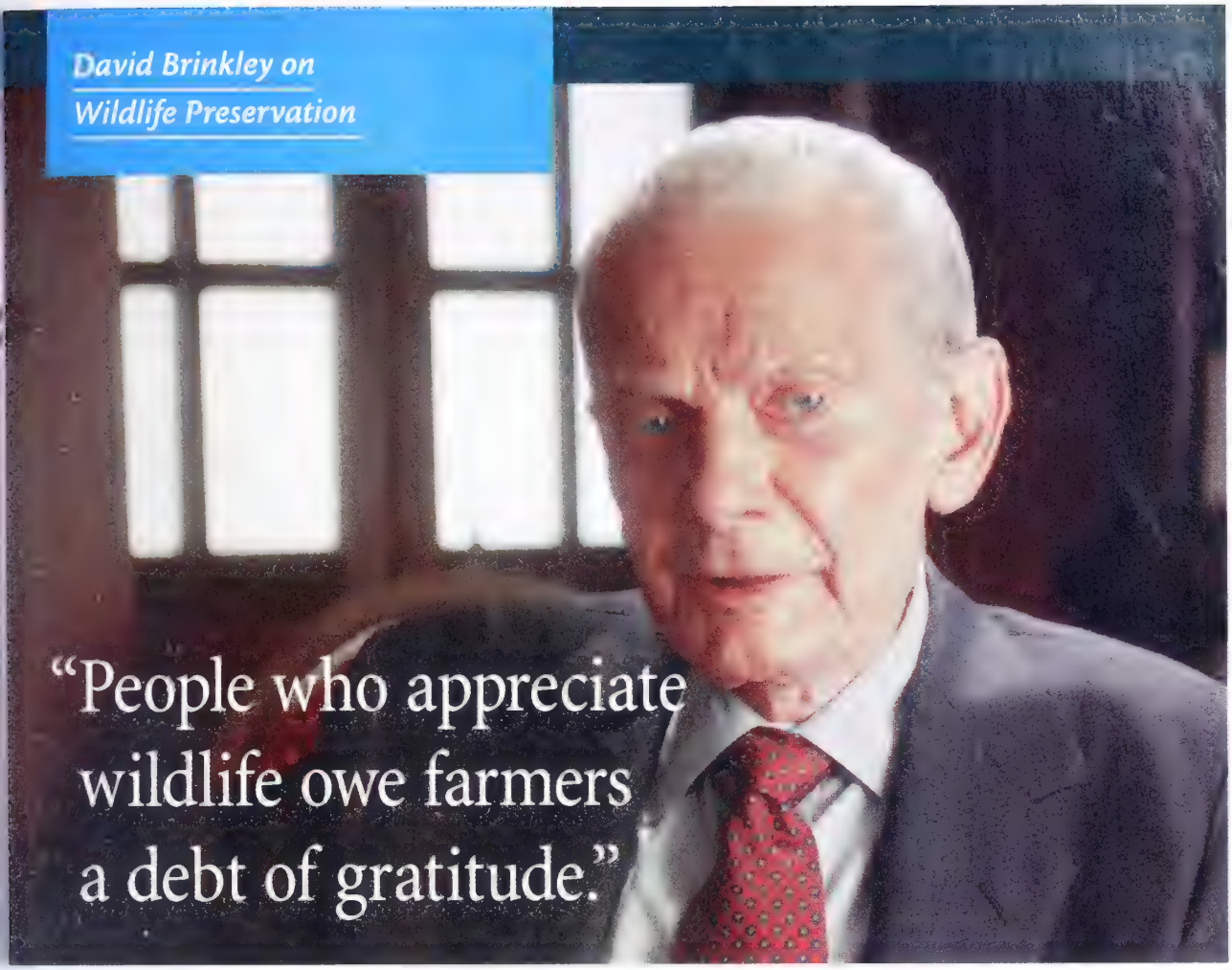
GENUS ET SCIENTIA

Forget that old saw about college women earning an "M.R.S." degree. Women age 25 to 29 have outdistan men in the proportion who hold college degrees.



FOOTNOTES The threshold at which spouses feel obliged to discuss purchases with partners: husbands, $299; wives, $40

DATA: LUTHERAN BRO



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"High-yield farming provides food—and in some cases shelter—for families everywhere."

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Readers Report

CAN MAIN STREET COMPETE WITH THE NET?

It is clear that E-commerce and other Internet business transactions will have a profound impact on our society ("Doing business in the Internet age," Cover Story, June 22). While you cover the positive business and societal impacts, you did not discuss those industries and other organizations that will have to undergo dramatic transformations to survive in an ever more wired world. Retailers, real-estate owners and developers, and state and local governments will all be forced to change the way they operate as more consumers and businesses turn to the Net.

As an economic-development officer for a growing suburb, I have some questions about what will happen in 5 or 10 years: Will all or a large portion of our big box-stores be empty? If so, how do we reuse them? Will we have to cut regular services due to a decrease in sales-tax revenues?

Lisa Strawn
Denver

HOW TO HANG ON TO THOSE BURNED-OUT WORKERS

"We want you to stay. Really" (The Workplace, June 22) described the employer's challenge in recruiting and retaining a committed work force. The "new work order"—created by downsizing, global competition, and the free-agent workforce—is causing companies to rethink human-resource strategies. Our 1998 study shows that a sense of urgency would be wise.

As you reported, workers have a more negative view of employers today, but our study found that one factor affected that perception strongly. Employees who were dissatisfied with "the direction the company is headed" depressed the commitment index. Those who were more than satisfied with company direction had higher scores.

Another reason for falling commitment is stress. The workforce is winded. Almost one-quarter of the 1,800 respondents indicated that they [illegible] working more than 50 hours a [illegible] Over half (53%) said they ha[illegible] burnout. Putting in long weeks [illegible] everything "better, faster, cheape[illegible] brought issues of balancing lif[illegible] work to the fore. The study re[illegible] that the most powerful driver of [illegible] mitment is for management to [illegible] nize that employees need to ba[illegible] work and family life.

David L.
Pre[illegible]
Aon Consulting's Loyalty Ins[illegible]
Ann Arbor,

My feelings about your article [illegible] swayed by an accompanying pi[illegible] four "wanted" employees, whose [illegible] age age would appear to be some[illegible] around 26! Nowhere is there a s[illegible] white hair. For those of us o[illegible] wrong side of 50, I expect the m[illegible] will continue to be: "Be loyal, give [illegible] and maybe—just maybe—we'll l[illegible] keep your job." The Young Turl[illegible] find that the corporations that [illegible] them to stay when they were un[illegible] are not so keen to keep them[illegible] they pass 40, much less 50!

Jim [illegible]
Algonqu[illegible]

LABOR AND MANAGEMENT HAVE BOTH FAILED GM

The unrest at General Motors[illegible] ("Quagmire in Flint," News: A[illegible] & Commentary, June 22) is yet a[illegible] example of failed leadership i[illegible] and management. It may well h[illegible] dent to close a specific plant bec[illegible] would cost more to make it proc[illegible]

CORRECTIONS & CLARIFICATIO[illegible]

"More questions for a Dreyfus funct[illegible] ager" (Finance, June 29) incorrectly [illegible] ed that American Medical Technolog[illegible] stock first appeared in the Dreyfus Ag[illegible] sive Growth fund in its March, 199[illegible] folio listing. The shares were first bo[illegible] the fund in February, 1996.

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uch a decision should be made in of how workers can be retrained eassigned within the company. Part e problem is that an "us/them" ality has sidetracked strategic is- that relate to employees' future o the buying public while enhanc- rofitability and market share.
n anyone estimate the cost to one? Labor and GM management no common vision of where the any should go and are more inter- in their own power than in what t for their shared future.

Catherine Tarrant
Huntley, Ill.

E THEORY WASN'T MEANT E A FORECASTING TOOL

u may have come away from iel J. Mandel's review of *A Beau- Mind* ("The tortured genius be- game theory," Books, June 22) with ative attitude toward the book and theory itself.

All models break down at some level because they are merely simplified versions of life and cannot possibly control for all variables. Game theory, too, often fails to forecast with precision, yet this is not its purpose. Game theory is simply a method of modeling how players interact. It is an effective method for analyzing all available data so that the modeler can better understand how decisions are reached interdependently, given the assumptions of the model. I use game theoretic equations in business and in life, not with the expectation that all outcomes will be optimal, but rather that "bad" decisions will be minimized.

It is a useful tool that can model simplistic scenarios, as well as the highly complex. Corporations (and individuals) would likely benefit from a rigorous understanding of how to incorporate game theory into everyday life.

William B. Hakes
Executive Vice-President
Statistical Advisers Inc.
Atlanta

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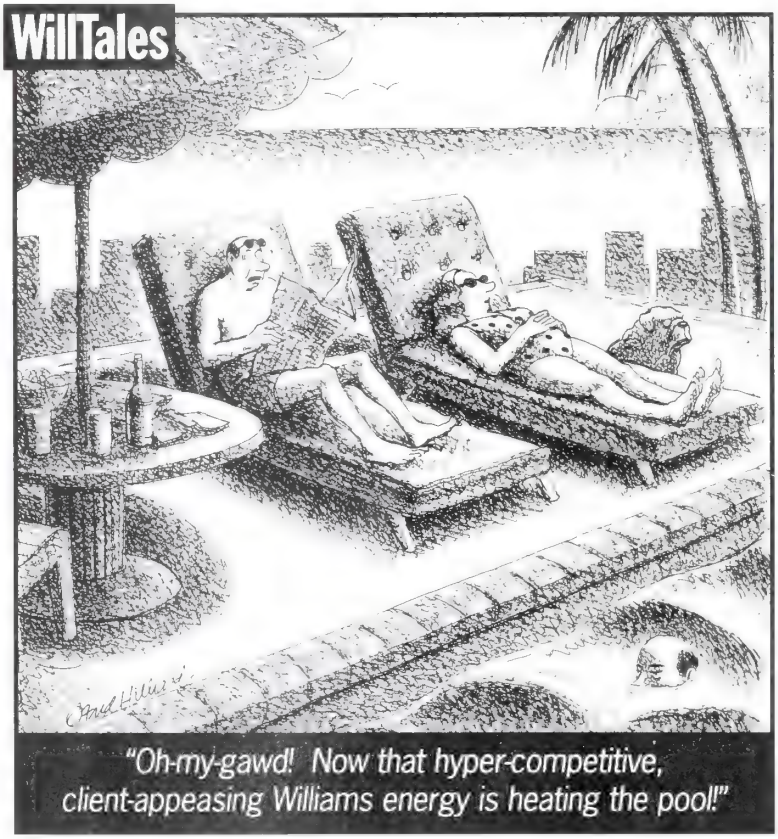

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BY STEPHEN H. WILDSTROM

THE LAMBORGHINI OF LAPTOPS

Apple's core customers will cheer, but road warriors prefer lighter machines

"Think different" is the ungrammatical slogan at Apple Computer today, and when it comes to laptops, the company is taking its own advice. At a time when leading-edge notebooks are getting thinner and lighter, Apple's newest PowerBooks are behemoths. This is a case, however, where bucking the trend makes sense for Apple and its most important customers: graphic artists, Web designers, and other producers of multimedia content.

Most Windows laptops aimed at business customers offer more power than people need. But Apple's high-end customers have an insatiable appetite for speed, and the top-of-the-line versions of the new PowerBooks are uncompromisingly designed for performance. Unfortunately, since Apple uses the same 2-inch-thick, 7-pound-plus package for all its laptops, less-demanding buyers don't have the option of giving up a bit of performance for less bulk and weight.

I tried the ultimate model, featuring a 292 Mhz PowerPC G3 processor and a stunning 14.1-inch display (Apple offers a nearly unlimited choice of configurations through the Apple Store at www.apple.com). It was without doubt the fastest notebook I have used. It completed a series of complex image manipulations in Adobe Photoshop 5.0 in 29 seconds. The same sequence on an IBM ThinkPad 600 with a 266 Mhz Pentium II—the fastest mobile Pentium on the market—took more than three times as long.

The new PowerBook is not just a speedster. Style has always counted in the Mac world, and the PowerBook is graced by an elegant design that includes gracefully curved sides and big white Apple logos on the top and bottom. The laptop features two identical bays, one on each side, which can hold batteries or floppy, CD-ROM, or DVD drives. The devices can be hot-swapped, meaning you don't even need to put the computer into sleep mode to change, and eject levers make removing drives easy. The PowerBook also has an excellent keyboard.

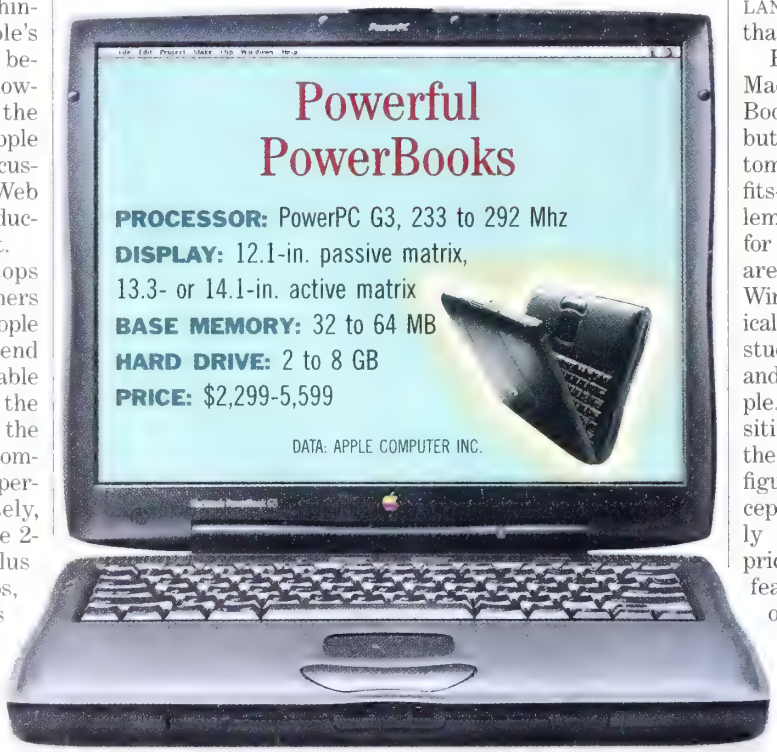
There is a price to be paid, however, for the PowerBook's speed. In the past, the low power consumption of PowerPC chips has allowed PowerBooks to run relatively coolly. But the G3 notebook runs at least as hot as any Pentium II laptop, making it downright uncomfortable to keep on your lap for extended periods of time. Battery life runs about three hours on a charge, a bit better than average for a machine of this class.

One serious defect of the PowerBook is the lack of any sort of docking arrangement. True, just about everything you would want in a computer is built in. All models come with an Ethernet port for connection to local-area networks, and all but the most stripped-down versions feature a 56K modem. There are modem and printer ports, a video jack for hooking up to a standard TV set, and a SCSI interface for connec scanners or disk drives cluding the high-capacity Zip, and SyQuest dr much favored by gra artists. (An internal Zip should be available later summer).

Although its display, board, and features make PowerBook more than quate as a desktop rep ment, who wants to hoo all those cables every you come or go? The Po Book is badly in need simple port replicator would allow you to mak the connections by slip the laptop into a simple In addition, even with use of Apple's Location ager software, it is far difficult to switch bet LAN and dial-up connec than under Windows.

For the most dema Mac users, the new Po Book is a dream come but for other potential tomers, the current one fits-all model has some lems. It's too big and h for the mobile executive are snapping up thin, Windows laptops. In the ical education market, c students are big laptop and many of them favo ple. They are very pric sitive buyers, however the cheapest PowerBoo figuration costs $2,299 cept in raw speed, it se ly lags behind a sim priced Dell Inspiron 3 features. Meanwhile, a of less capable, but than adequate, Wi laptops is hittin market at $1,500 o

At the high en ple has done a good job of pro portable power to a ve portant group of custo But to go beyond a term survival strateg once again become a player in mobile comp Apple has to expa product line to meet th ied needs that make laptop market.



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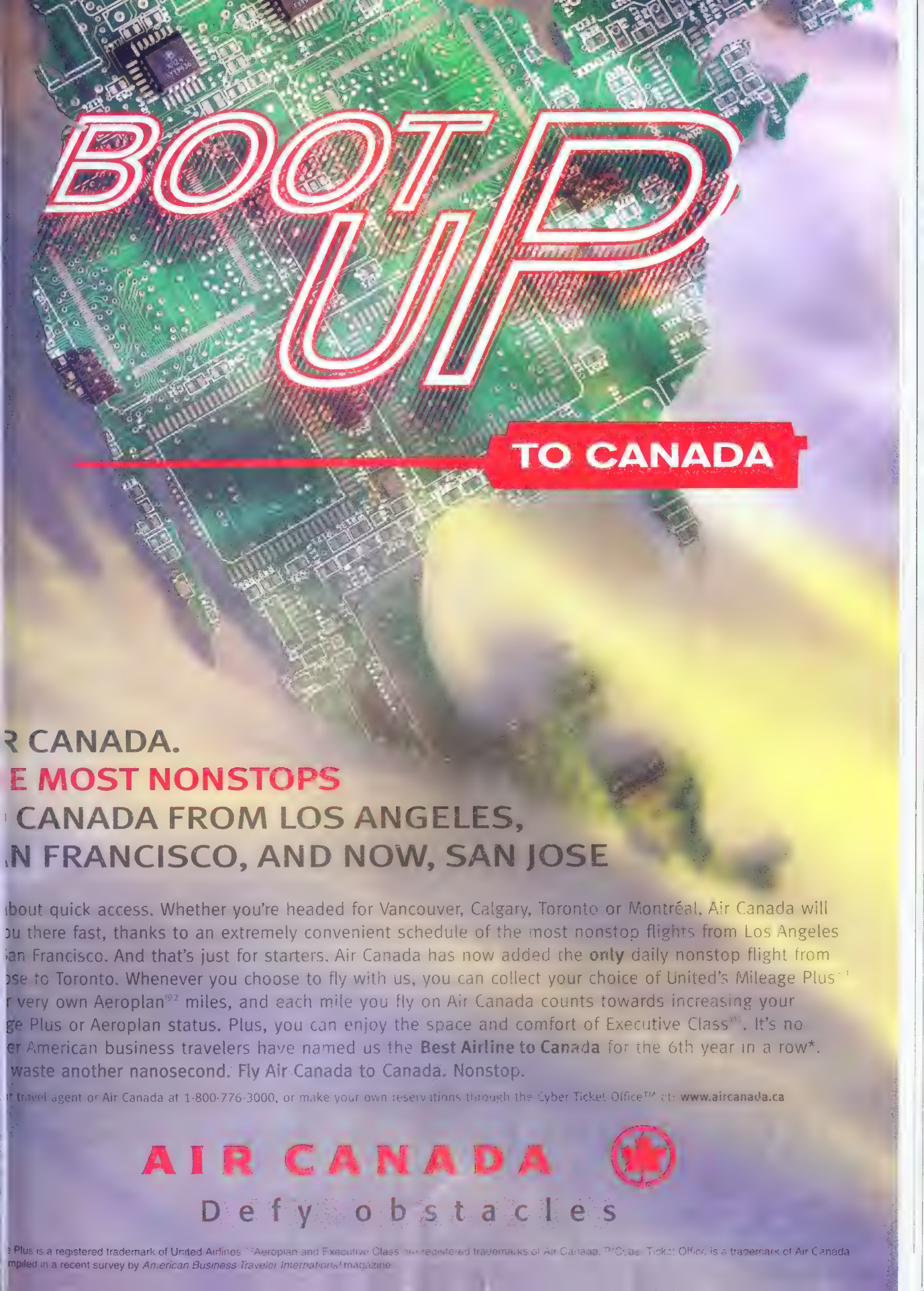

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ing the likes of Donald Soderquist in the audience. Afterwa
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chat with a leader of one of America's most successful comp
The experience was inspiring."

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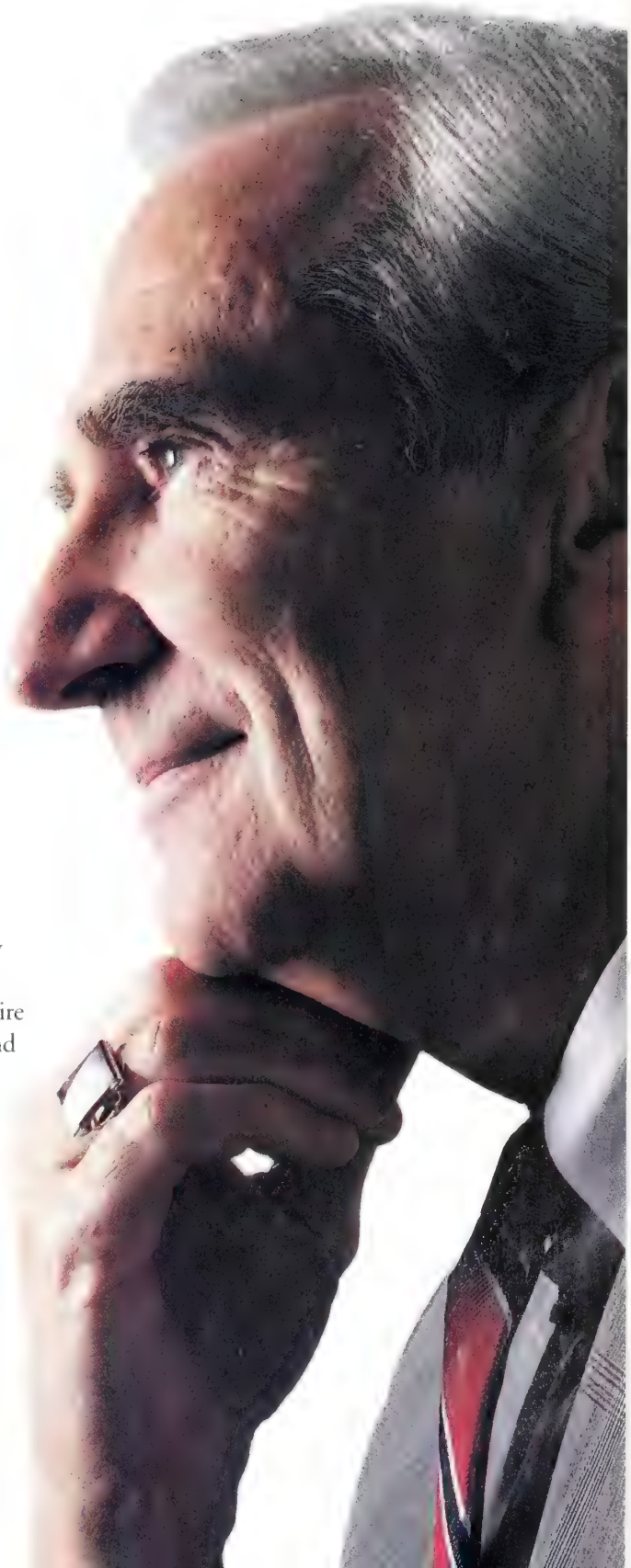

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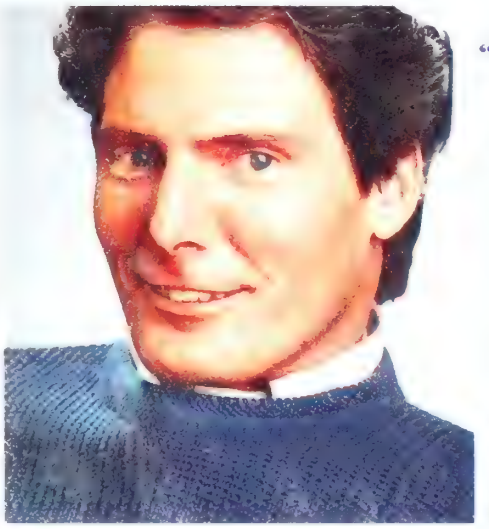

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– Christopher Reeve
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OBERT J. BARRO

ILTON FRIEDMAN: BEING RIGHT S THE BEST REVENGE

VERSAL: ce upon a ie, Keynes s king and edman was iculed; w, his e-market ories rule roost

J. Barro is a professor of eco- at Harvard University and a ellow of the Hoover Institution k@harvard.edu)

At the Harvard University I knew as a graduate student in the late 1960s, Milton Friedman was treated as a right-wing Midwestern crank. Most of the derision applied to his views on money, including the argument that inflation was always and everywhere a monetary phenomenon. Even the permanent-income theory of consumption—his scientifically impeccable model in which consumer demand depended on a household's anticipated long-run income—was subjected to poorly reasoned criticism.

Friedman's contributions to public policy, as expressed most effectively in *Capitalism and Freedom*, were dismissed by being ignored. Thus, we unfortunate PhD students did not learn about his prescient ideas. Many of these once radical ideas have become mainstream policies and others are on the active agenda. The all-volunteer army has worked well for many years, the earned-income tax credit is a boon for the working poor, the flat-rate income tax is a serious proposal in Congress, and school vouchers are under consideration in many states. The current debate on Social Security reform is primarily over the extent and form of private accounts, rather than the wisdom of any privatization. Some years from now we will perhaps be seeing a similar debate over the details of drug legalization, one of Friedman's most recent policy proposals.

MONETARY GURU. Ironically, the only person to rival Friedman for policy influence in the 20th century is John Maynard Keynes, who had a strikingly different view of the role of government. Keynes was influential because he advocated more government intervention into what he perceived as poorly functioning private economies caught up in the Great Depression. In contrast to Keynes, Friedman put the primary blame for the depression on government failures, especially of monetary policy. Hence, the Depression did not conflict with Friedman's preference for less government and tighter rules to constrain macroeconomic policies. He also found in the Federal Reserve's failure to prevent deflation an argument in favor of monetary rules. As the world evolved—with price stability becoming the major mission of central banks and free markets, and property rights becoming the central policies to promote economic growth—Friedman surely won the intellectual battle.

Noneconomists who want to know about Friedman's ideas are best advised to read *Capitalism and Freedom* and *Free to Choose*. But his recent autobiography—*Two Lucky People*, written with his wife, Rose, and published last month by the University of Chicago Press—fills in many of the facts about his transition from pariah to priest. For me, a key lesson is that Friedman's influence was achieved mainly through the force of ideas, not by direct participation in the policy process. Except for work during World War II, including his unfortunate contribution to the establishment of income-tax withholding, Friedman has avoided government employment. Thus, the key advice to academic economists in his memoirs is: "...by all means spend a few years in Washington—but only a few. If you stay more than two or three you will become addicted and will be unable effectively to return to a scholarly career." My only disagreement is that two or three years in Washington is too long to retain one's scientific edge.

OP-ED EXPERT. In a similar vein with regard to congressional testimony, Friedman says: "I long ago decided it was a waste of time to testify before congressional committees. Spending the same time writing an op-ed piece or giving a talk is a more efficient use of time for the purpose of influencing policy." (I am, of course, pleased to learn from Friedman that op-ed pieces are an O. K. use of one's time.) Friedman particularly had great influence in writing for *Newsweek* from 1966 to 1984, although his termination in favor of a couple of mere journalists was perhaps not the most brilliant decision in the history of publishing.

My biggest complaint about Friedman's memoirs is the omission of the best photograph of him that I know of. This photo, taken by George Stigler, the codeveloper of the Chicago school of economics, shows Friedman receiving a speeding ticket from a policeman on Lake Shore Drive in Chicago. Although Milton apparently found it optimal to break the law, the picture shows clearly that he was cooperating fully with the local authorities.

We are fortunate that Friedman had the good humor and self-confidence to persevere in the face of many years of scorn by liberal economists and journalists. The tables were turned on his detractors many years ago, and—to paraphrase Milton's famous quote about Keynes—we're all Friedmanians now.

A closed network is an oxymoron.

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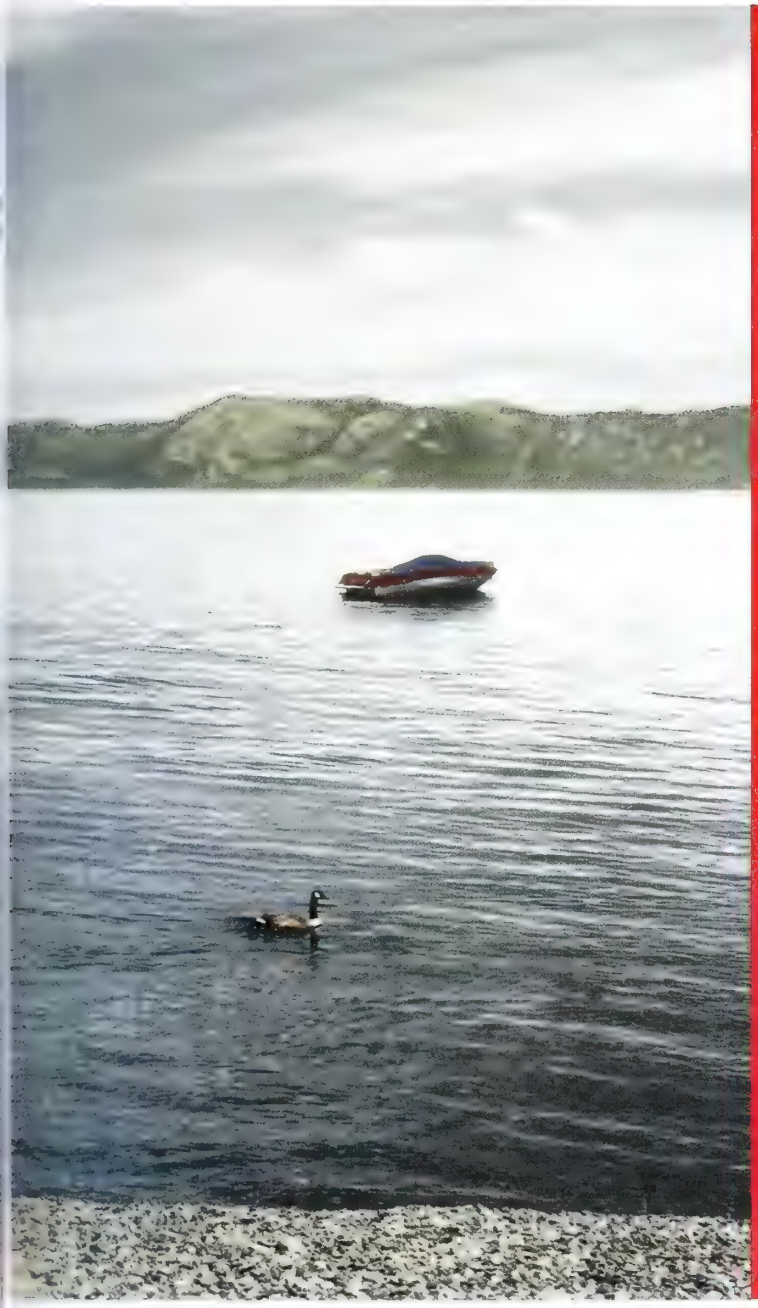

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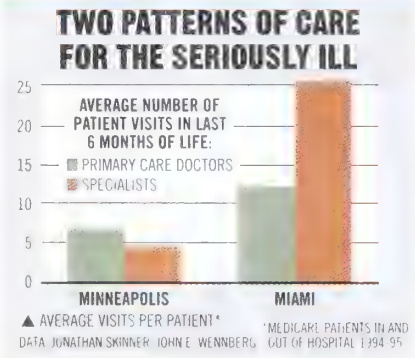
BY GENE KORETZ

HOW TO CURE MEDICARE'S ILLS

Treatment styles may hold a key

Only a few years ago, it looked as if the U.S. had finally managed to put a leash on surging health-care expenditures, which consume some 14% of gross domestic product. Now, with costs picking up steam again, the search is on for ways to control spending—not only to ease the pain for current employers, workers, and taxpayers, but also to lighten the massive burden that lies ahead when the baby boom generation enters its retirement years.



One potentially useful tack is suggested by a new study by economist Jonathan Skinner of Dartmouth College and physician John E. Wennberg of Dartmouth Medical School that focuses on geographic disparities in Medicare spending. Specifically, the study looks at differences in outlays and care for patients in the last six months of their lives, a period that accounts for some 30% of total Medicare expenditures.

Such differences can be stark. Comparing Miami and Minneapolis in the mid-1990s, for example, the researchers find that Medicare spending per patient in the final months of life, adjusted for illnesses, local prices, age, sex, and other variables, was more than twice as high in Miami. Average days per person spent in intensive care were nearly four times greater. And billed doctors' visits both in and outside of the hospital varied as much as fivefold (chart).

The higher expenditures and more intense treatment provided in a city like Miami might make economic sense, of course, if they paid off in terms of better health outcomes. But the study's analysis of such high-spending areas across the U.S. turns up no evidence that they enjoy reduced mortality rates. And past research indicates that many patients prefer less intense care after they are informed of the risks and benefits of various treatments.

What apparently does affect Medicare spending is the level of local resources. The higher the number of hospital beds or specialists relative to the population, report the researchers, the greater the outlays for people in their final months of life are likely to be. Such spending is also strongly correlated with the presence of for-profit hospitals.

These findings point to the tantalizing possibility that both Medicare and overall health spending could be reduced significantly without harming people's health. Indeed, Skinner estimates that bringing national care levels close to those prevailing in a city like Minneapolis would cut projected Medicare spending by 20%, producing big surpluses well into the next century.

The sticking point is getting health-care providers to change their practice styles without lowering the quality of care. The problems many health maintenance organizations have had trying to effect similar changes suggests that such a major reform would be far from easy.

RIVAL REPORTS ON CONSUMERS

Which index is a better harbinger?

Is everybody happy? Each month, economists keep a weather eye on the results of the nation's two major surveys of consumer attitudes: the University of Michigan Index of Consumer Sentiment and the Conference Board's Index of Consumer Confidence. But while both are supposed to measure the same thing, they're not exactly equal in their predictive power nor do they always move together. (Both are currently quite high, but the Michigan index has been slipping a bit this year.)

As it happens, the Michigan index is a component of the index of leading indicators of economic activity, compiled by the Conference Board. And in that broad role, it does appear to have an edge over the Conference Board's measure—turning downward earlier before recessions, for example. A study by economists Jason Braun and Sydney Ludvigson of the Federal Reserve Bank of New York indicates, however, that the Conference Board measure is actually far better at predicting the path of consumer spending.

Specifically, they found that the C fidence index significantly improved f casts of overall household spendin the next quarter, even after such v ables as wages, stock prices, inte rates, and past spending were facto into the equation. By contrast, the C sumer Sentiment index added relati little information—except in the cas motor vehicle outlays.

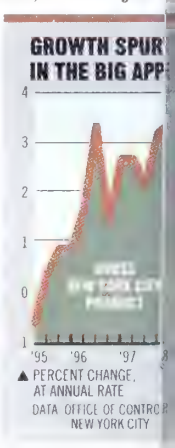
Why the difference? The econom note that the Conference Board su queries respondents on job prosp over the coming six months—a con that seems to influence near-term sumer spending strongly. By contr the Michigan survey focuses on pers finances and business conditions over next year or longer. Since automo purchases involve long-term as wel short-term financial considerations, no surprise that vehicles are the product for which spending forecasts be significantly improved by using results of both surveys together.

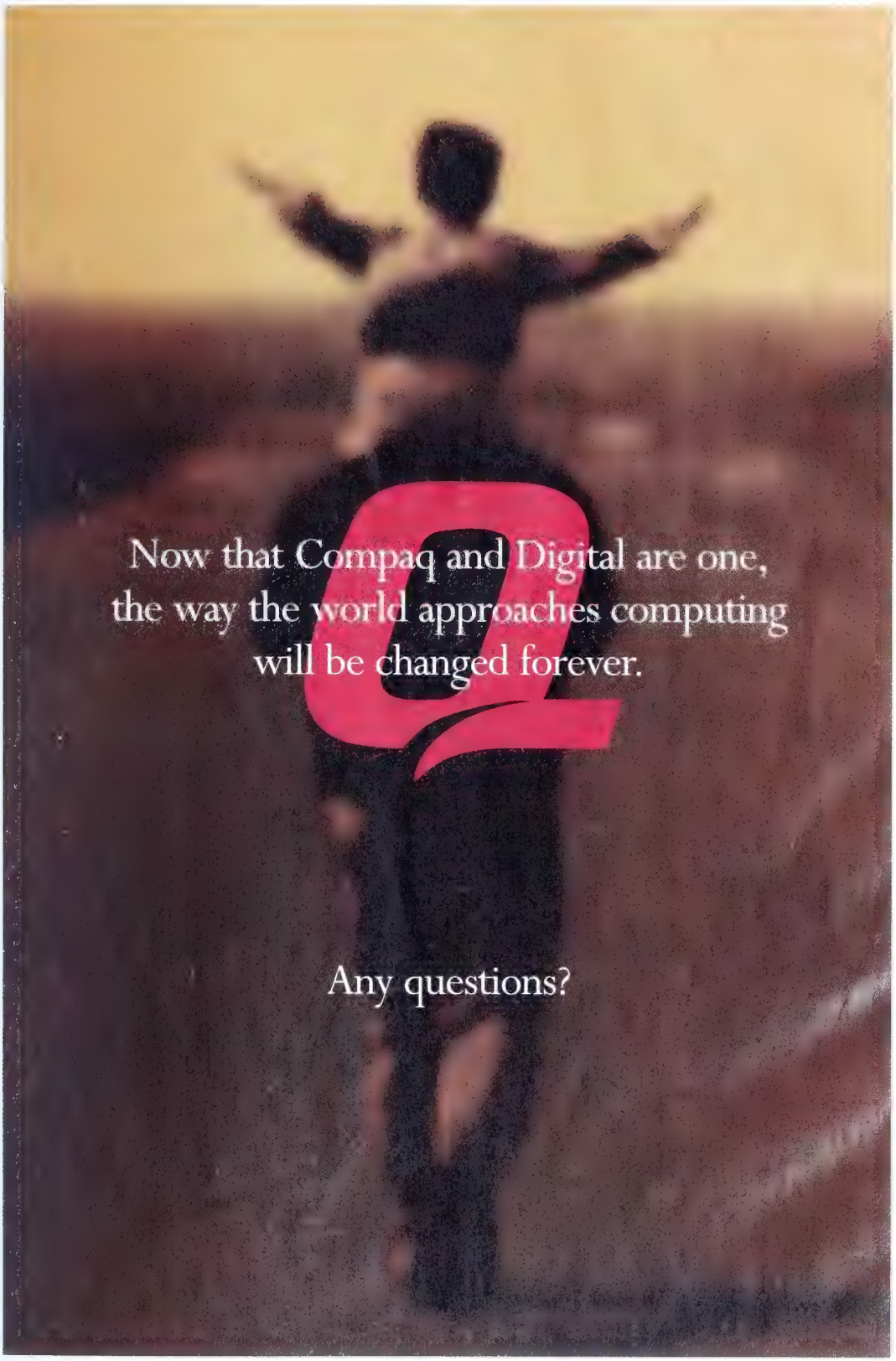
IT'S NOT JUST MANHATTAN

New York City's widespread revi

Just a year ago, New York City's employment rate hit a double- peak of 10%, even as joblessness p meted nationwide. Now, the city is ing catch-up. Unemployment is d by more than two percentage po private-sector job gains have accele ed to a 4% annual rate, and the economy grew at a 4.1% annual cl the first quarter, the fastest quar rate in 11 years.

What's more, note economist Chase Manhattan Bank, it's not just Street that's providing the economic energy. They point to booming tourist and motion picture industries, surging activity in Manhattan's Silicon Alley, and the growth of small retailers and even small- and medium-sized manufacturers in Brooklyn and Queens. Indeed, each of the four outer boroughs, observes the bank, is now a of Manhattan in recouping the job l it suffered earlier in the decade.

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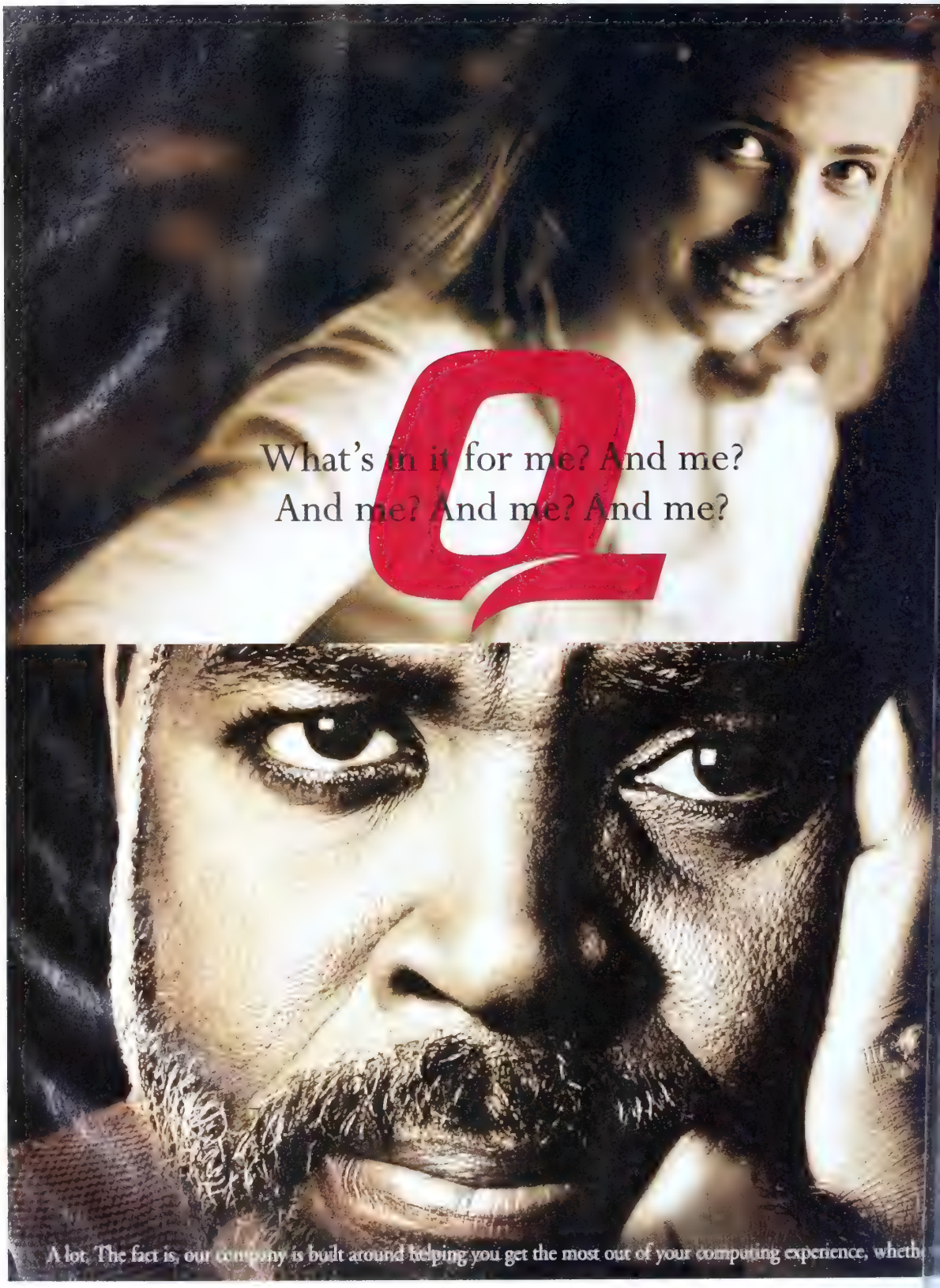
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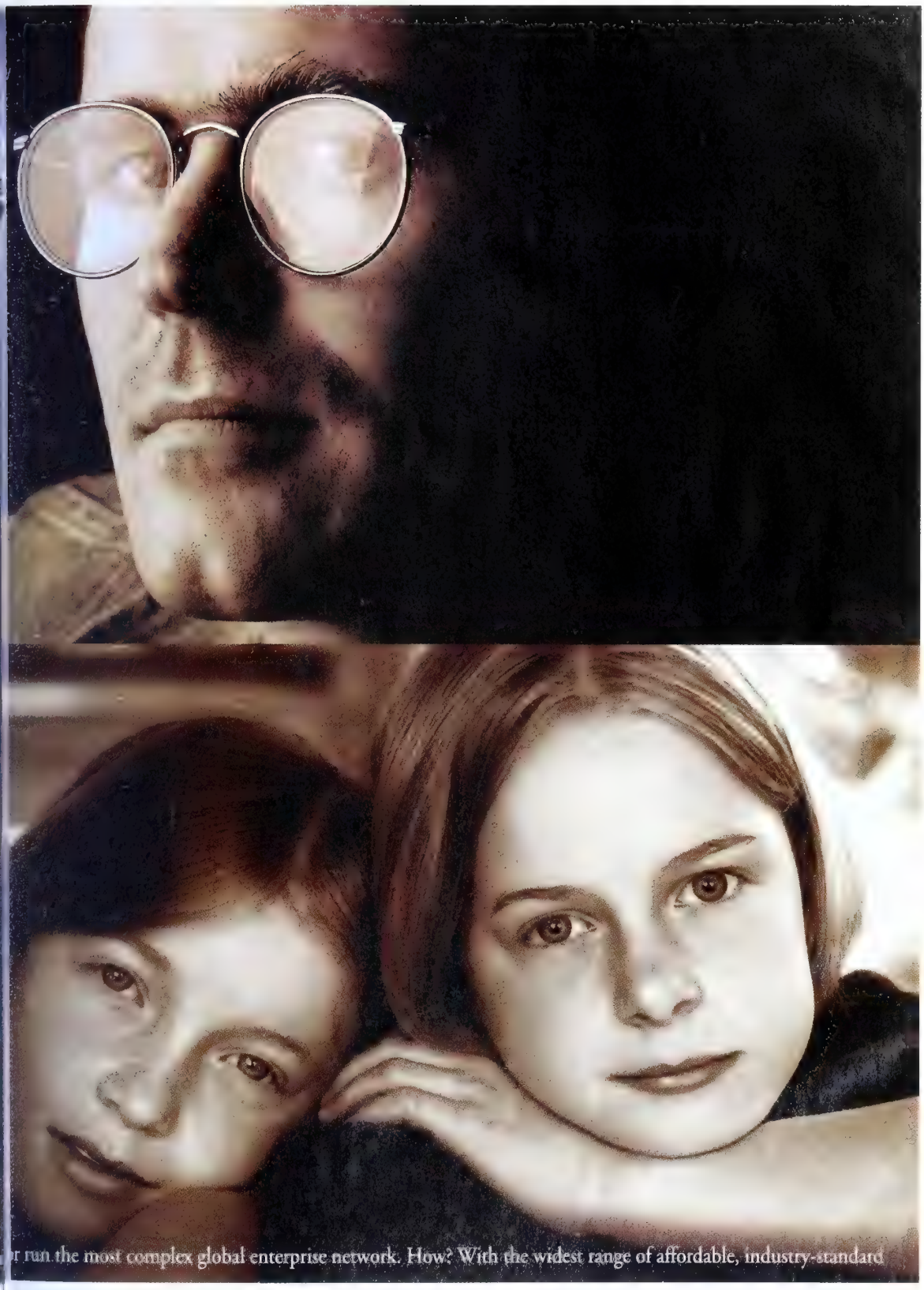

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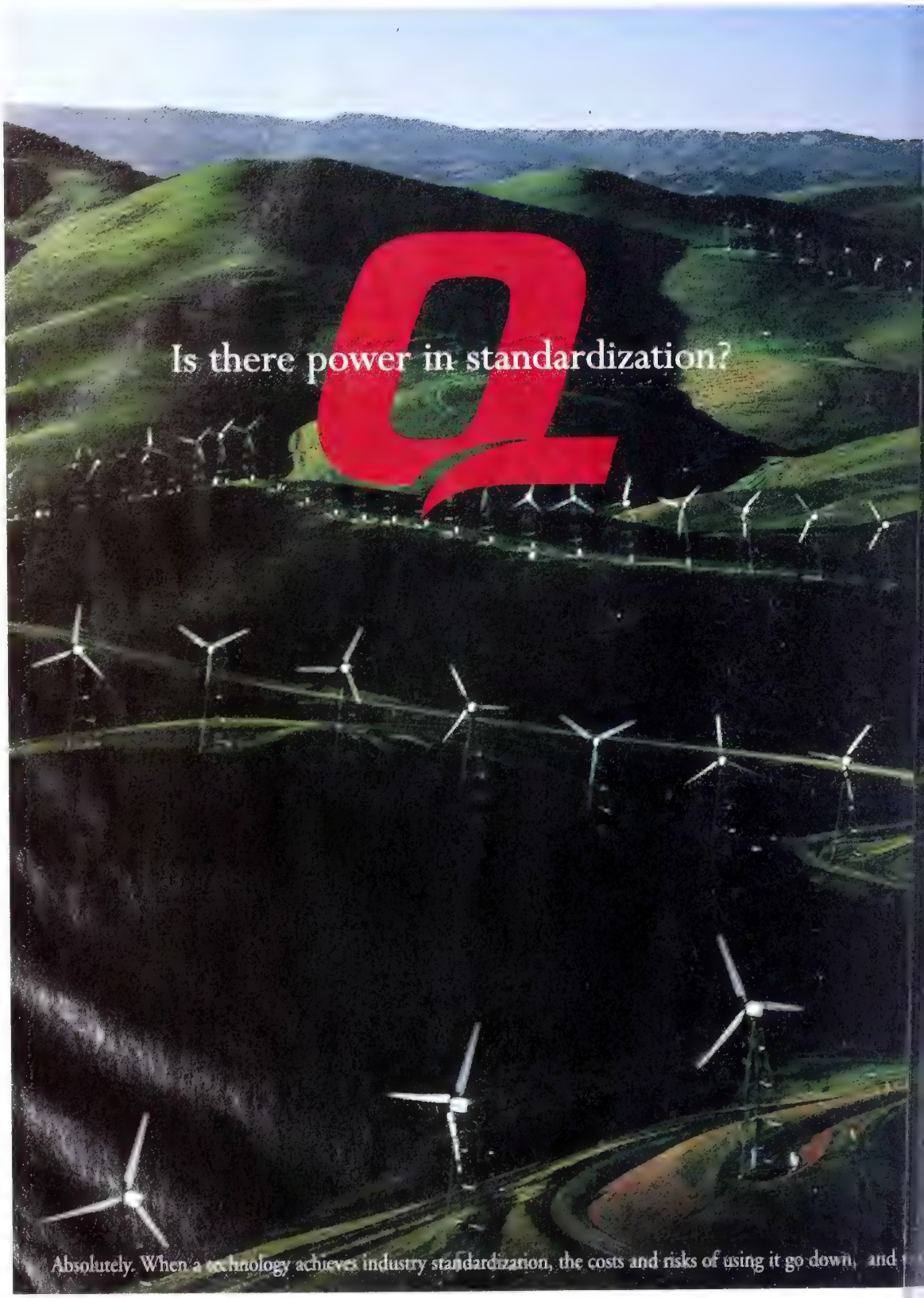
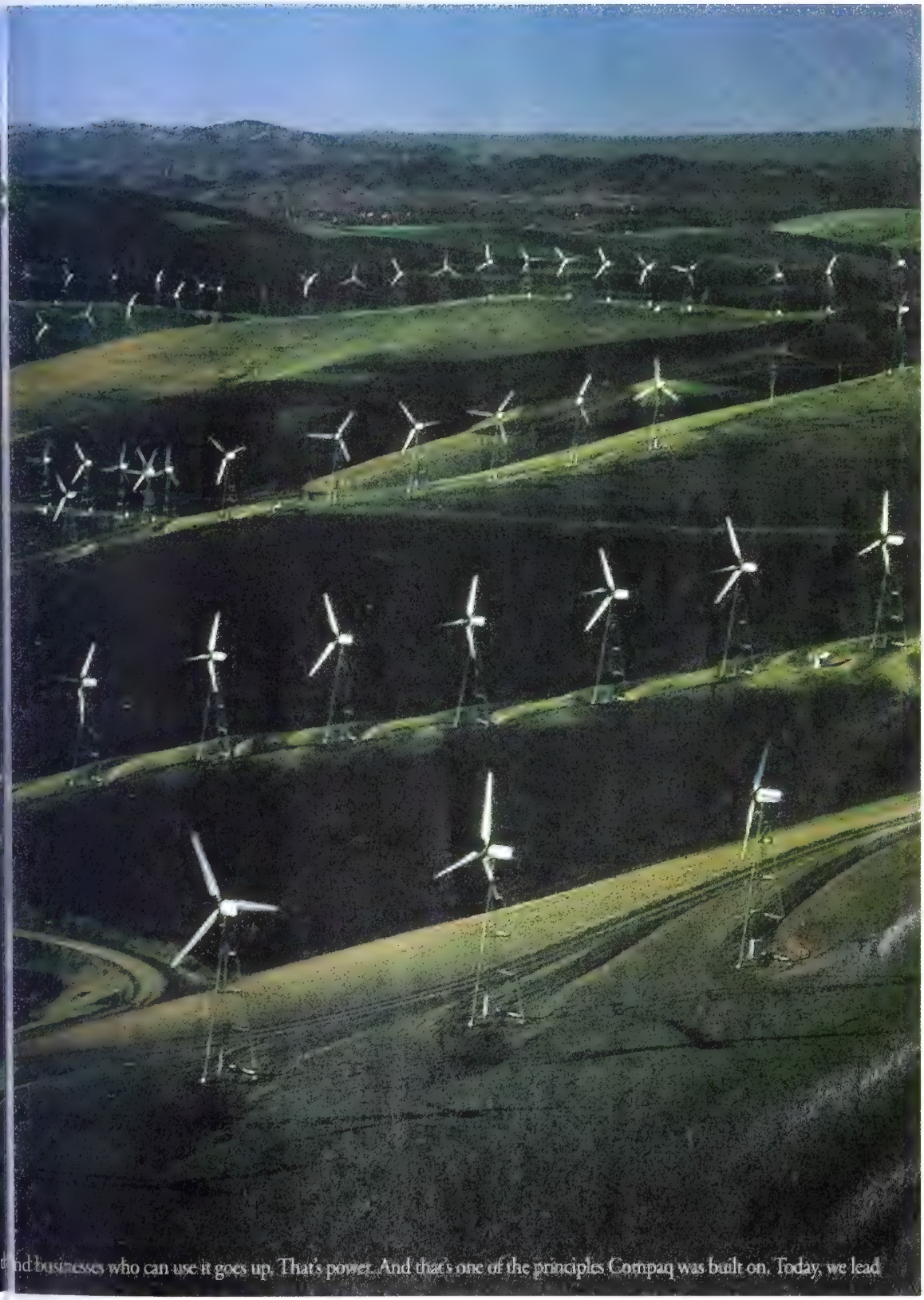


the way in taking the best, most deserving technologies—whether for the desktop or the enterprise—and pushing h



ance and greater affordability. So that more people end up with more ways, better ways, of doing what they need to do.

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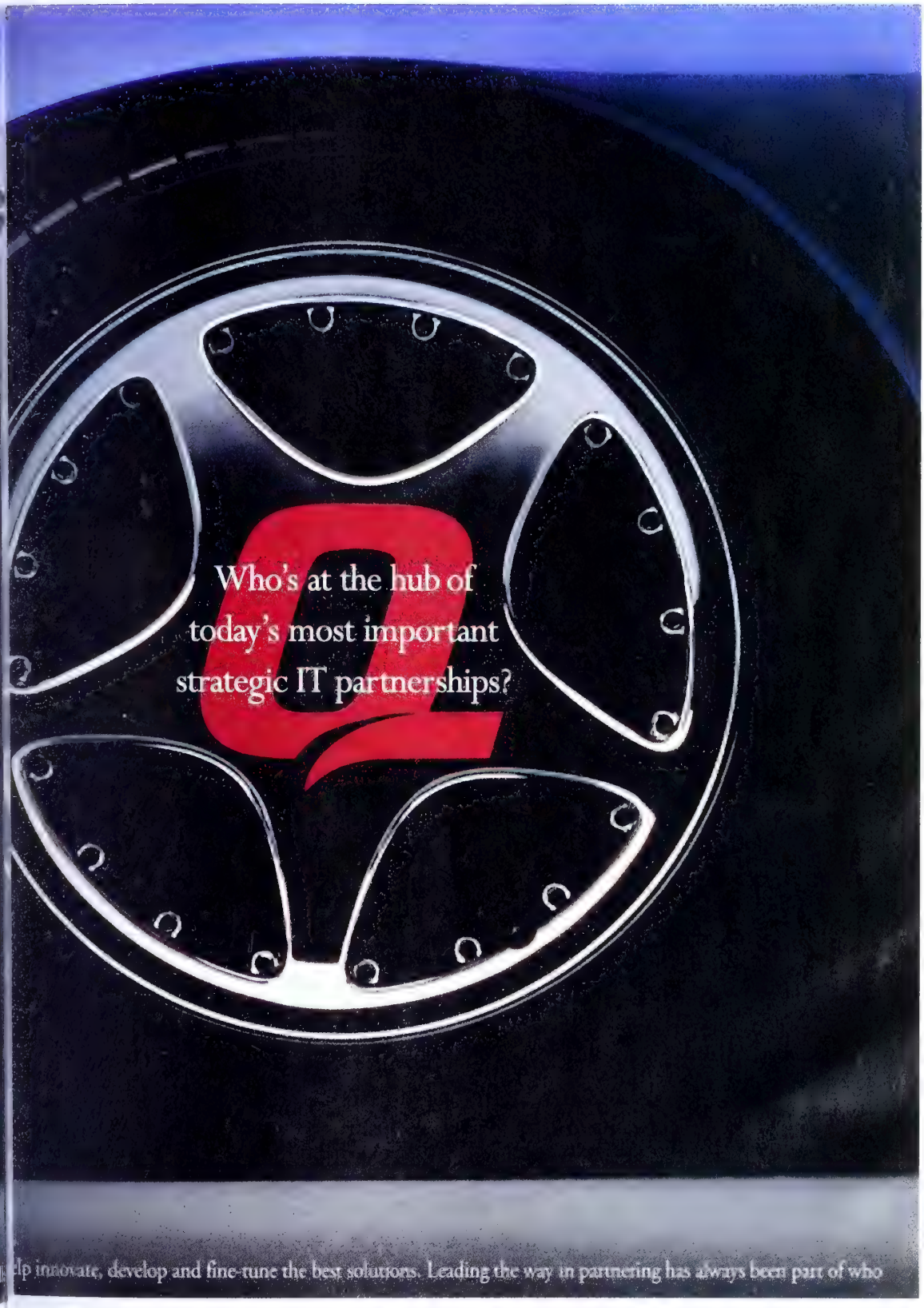
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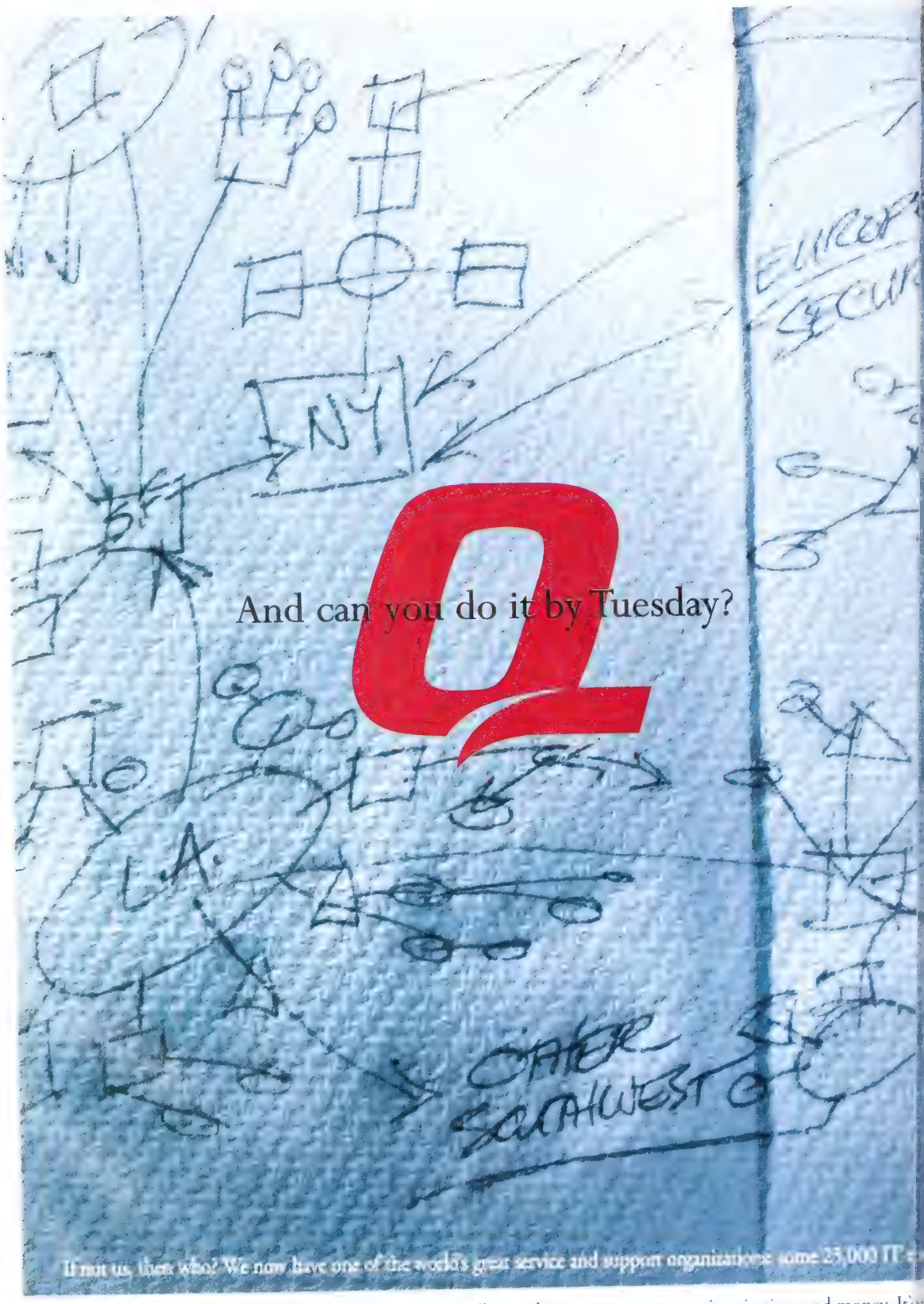
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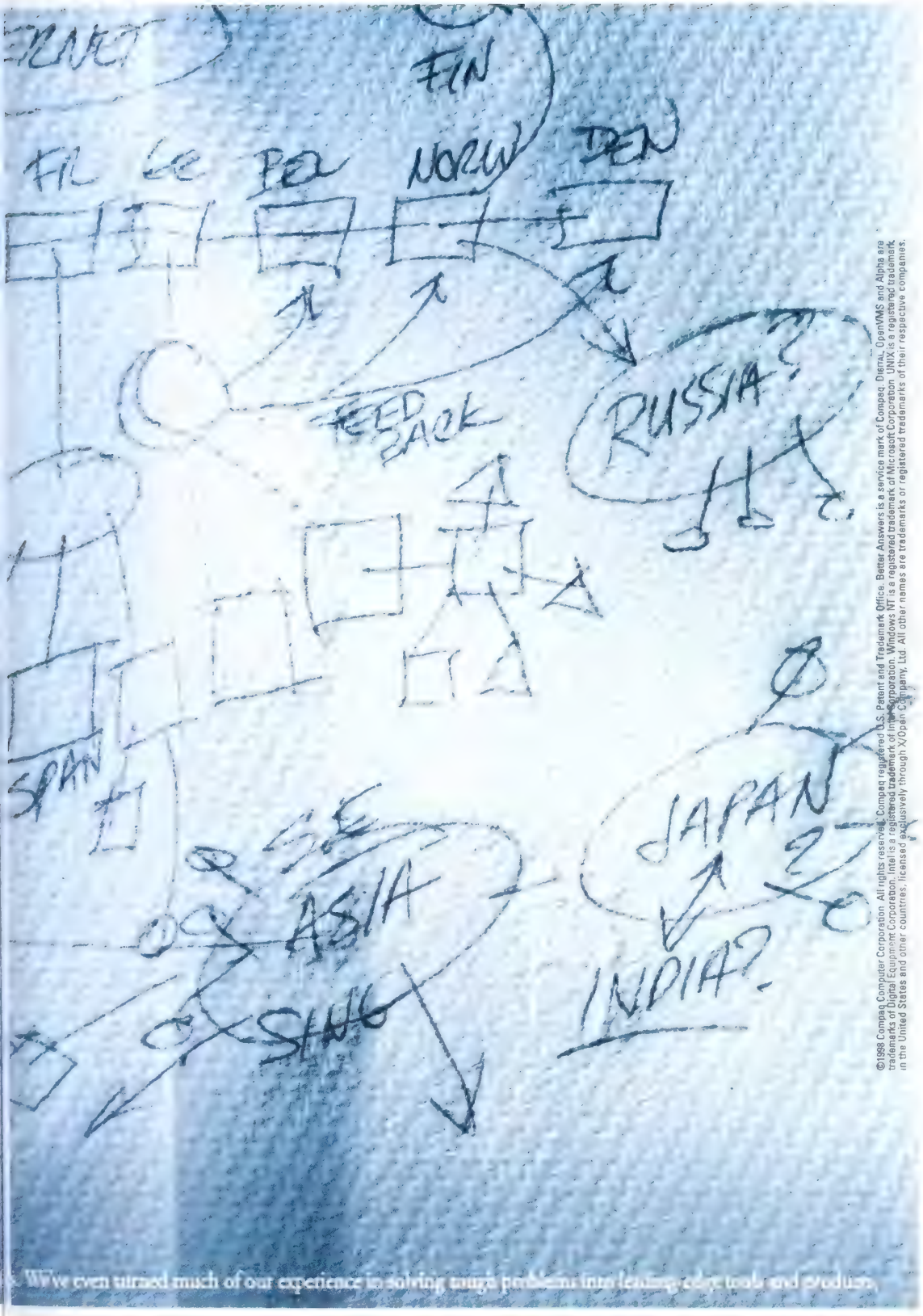

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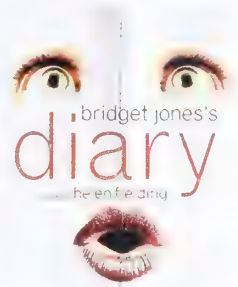
NGLE WOMEN A HOSTILE WORLD

you want evidence of a major de- ıographic shift at the end of the illennium, count the number of people over 35 in your workplace. ːes are you'll come up with more ːn than men. If so, you are catch- n to one of the more significant trends of the past decade. Ac- ıg to the U.S. Census Bureau, the er of women living alone has dou- during the past 20 years, to 15 n, while the number of solitary even though the figure has tripled, ly 10.3 million. As of last year, were 46 million single women over ge of 18 and 38 million single men. ;, it's the age of the single woman, ɔroad implications for both the cul- and the economy. They certainly see themselves as spinsters, old , or crazy Miss Havishams—the ive stereotypes of yesteryear. urried women are buying houses, ıg sport utility vehicles, bearing ɔpting children, and rising to posi- of influence. As part of the zeit- they are all over the ʻeen, ranging from the —*Ally McBeal* and *enly Susan*—to the wered—see *Cybill* or ːcently ended *Murphy i*. And they are finally g some books that re- the complexities of lives.



new literary genre is ging, along the lines of single, hear me roar." recent examples are *mprovised Woman: Single Women enting Single Life*, a serious work arcelle Clements, and the light- ed British best-seller *Bridget 's Diary*, a novel by Helen Field- The two might seem to have little nmon. Indeed, Clements has al- harrumphed in *The New York Times* that Fielding's book represents "the humor of the pathetic." But both books are about single women trying to make their way in a hostile world of what Bridget Jones calls "smug marrieds." It's just that the Bridget book takes itself a lot less seriously.

Clements, a single mother, started her book in the early 1990s, when she realized that her life had turned out to be different from the one she had been raised to expect—and she didn't really mind. She determined that both the status and the psyche of single women today are unlike those of even 20 years ago, and that singleness is no longer unusual. In fact, says Clements, due to delayed marriages, high divorce rates, low remarriage rates, and longer life spans, most American women can expect to be married only half their adult lives. Or as one woman quoted in her book says: "I'm off the grid. Self-supporting, bringing up two kids, divorced two years [ago], and not one date since."

Clements decided to examine the implications of being "off the grid" by interviewing more than 100 single women from age 24 to 96. She starts each chapter with a long essay on a chosen subject, such as having or not having children, dating at a later age, creating your own home, even dying alone—and follows each with excerpts from the interviews.

The essays can be thought-provoking, particularly when the author challenges common assumptions. Clements suggests, for example, that despite the conventional wisdom, one can have a fulfilled life without intimacy. And she writes that men and women should "be more honest about our conflicting need for both freedom and love." But Clements' style is often disconnected, and she tends to ramble on about irrelevant issues. When discussing the definition of home, for example, she devotes several pages to the many women she knows who talk about the pros and cons of good sheets. Funny, but I can't remember ever having an extended conversation about sheets.

Clements' book really bogs down in the interview excerpts. Women in their 20s, 40s, and 90s have widely divergent views on the single world. They tend to be single for different reasons, so the links between the excerpts often sound forced. Also, the descriptions of the various women don't contribute much. We learn such seemingly irrelevant details as that "Eileen Y., from Gloucester, has gray-blonde hair and moves with graceful deliberateness" or that "Abigail Z., 37, an architect, widowed after three years, is an emotional see-saw adept." Huh?

But the most irritating aspect of the *The Improvised Woman* is its self-righteous tone about the superiority of the single life—just as grating as the claims that married people make for coupledom. She makes sweeping statements, such as: "While there are a few 'good' marriages to be seen, even the good-enough marriage is still felt by many married women to be an arrangement that most benefits the man." Or: "Nobody wants to break up a marriage, but most people can't stay in one." True, there is a 43% chance that a marriage will end in divorce, but that's hardly "most."

In all likelihood, most single women have nothing against marriage. It just hasn't happened for them, for whatever reasons, and they are neither sitting at home feeling miserable nor reveling in their solitude. They are just muddling through, trying to be accepted on their own terms. But if perchance they do feel blue, they can always pick up *Bridget Jones's Diary*, a fictional year in the life of a champion muddler.

Bridget's diary began life as Fielding's enormously popular London news-

IN BOTH BOOKS, WOMEN ON THEIR OWN ːOPE WITH LIFE AMONG THE "SMUG MARRIEDS"

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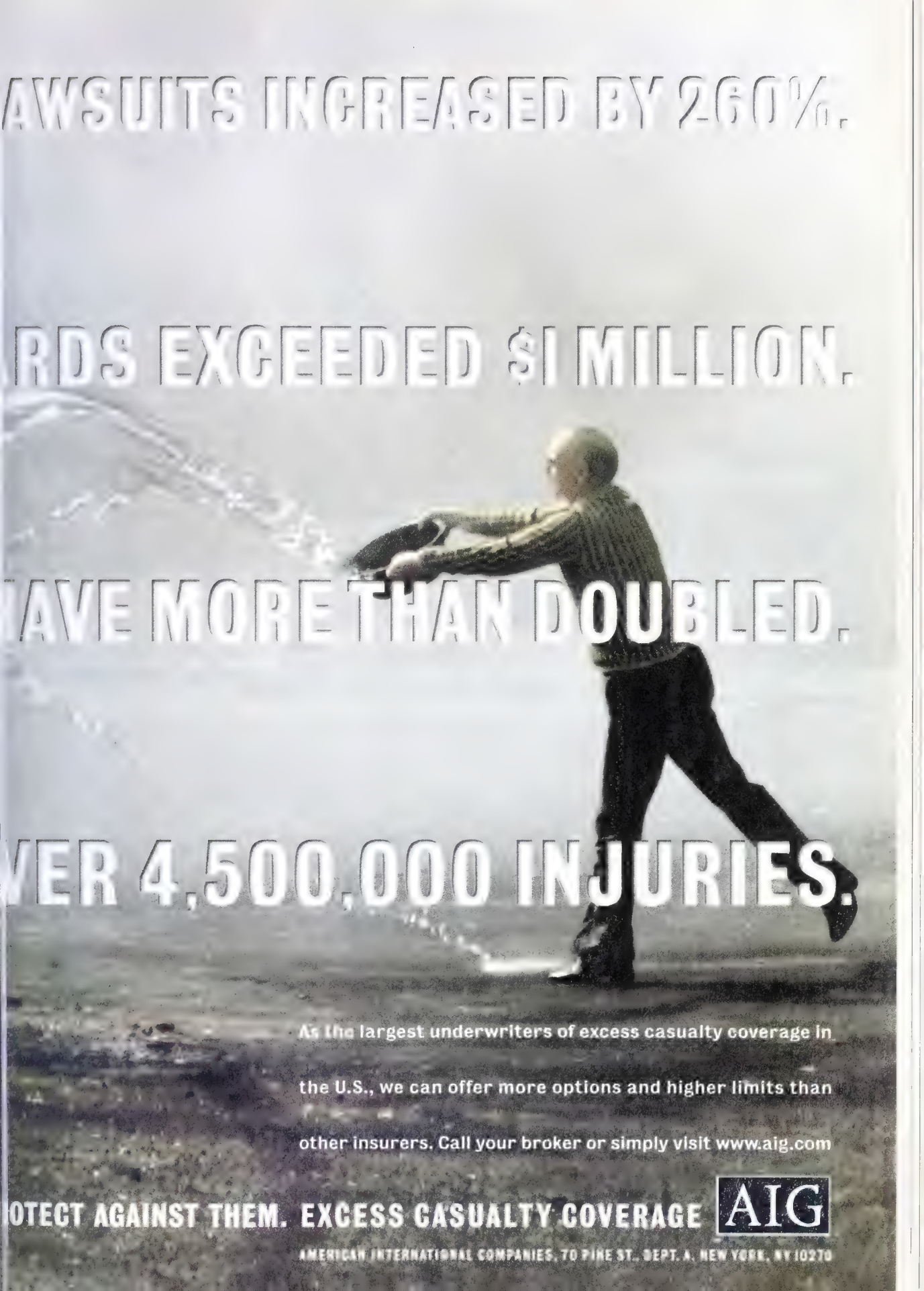
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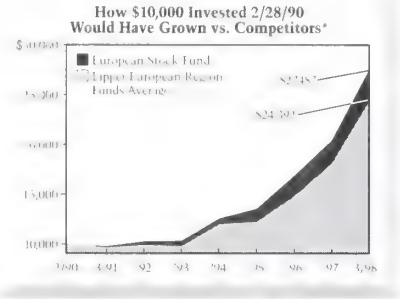

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on page 144

Books

paper column, first in *The Independe* now running in the *Daily Telegra* The book that grew out of the colu became a runaway best-seller in Brit last year. It's likely to have the sa success in the U.S.: The book hit *New York Times* best-seller list just t weeks after its debut in June, puttin rest Fielding's concern that Americ wouldn't find the novel funny beca they don't understand irony.

Bridget—much given to irony—i disorganized, insecure, weight-obses woman, with disaster-prone friends a family. She is a Chaplinesque Eve woman, stumbling through a world of couples and "singletons" while t ing to cope with a crazy boss and c zier assignments in her job at the B The book, which chronicles one yea her life, starts with a series of N Year's resolutions to quit smoking, l 10 pounds, find a decent boyfriend, develop "inner poise." Or as she put "I will not sulk about having boyfriend and instead develop in poise and authority and sense of sel woman of substance, complete *with* boyfriend, as best way to ob boyfriend."

Although Bridget accomplishes if any, of her goals, her efforts are larious. Each diary entry starts out her weight, number of calories ea alcohol "units" consumed, cigaret smoked, and moments spent having ative thoughts. Although the boo clearly meant to poke fun at Brid dithery insecurities, there is a rin familiarity about her day-to-day st gles. What single woman has not fr cally searched for a pair of panty without runs, dreaded a family hol suffered through a dinner party fu smug marrieds hinting that there be something wrong with her or sh would be married? Sure, Bridget is self-absorbed, man-obsessed—every that the modern single woman is n to abhor. But she is so much mor than most of the deadly serious w in Clements' book.

She is even more fun than the se people in her own diary. Take Mark cy. He's a dull lawyer Bridget initial jects and then—even though he gets more interesting—becomes i ated with after he rescues her pa from financial ruin. It's the one false At the end of the millennium, s women are more likely to rescue selves than to find a prince in shini mor to do the job for them.

BY CATHERINE A

Associate Editor Arnst is wid and single.

AMES C. COOPER & KATHLEEN MADIGAN

ONSUMERS ARE LL SMILES AND OPEN WALLETS

ck-solid fundamentals explain why they are spending with such gusto

U.S. ECONOMY An important economic lesson can be drawn from the recent rnment report that more than half of American s are overweight: U.S. consumers have trouble ex- ing restraint, whether it's at the dinner table or the ping mall. That's why the popular forecast of an aculate slowdown just doesn't add up. Consumers, major force of this economy of late, will not ease until some constraint compels them to rethink buying plans.

be sure, monthly data so far indicate that second- ter economic growth struggled to reach 2%. How- domestic demand continued to charge ahead, led onsumers and homebuilding (charts). The appar- sharp slowing in overall growth from 5.4% in irst quarter was caused by two factors other than stic demand: an Asian-led widening in the trade it and a slowdown in inventory growth.

TIMISM SHOWS NO GN OF TOPPING OUT

Second-half growth could very well pop back up to above 3%, mainly because consumers show no sign of taking a break. From the end of 1996 to the first quarter of 1998, household buying surged at a 4% annual rate. And the latest reports on spending and new-home sales suggest that the second-quarter pace showed no drop-off from that trend.

hile retailers and homebuilders are cheering this t torrent of consumer spending, the trend could p a problem in the second half. That's because con- rs must back off in some significant and lasting if the economy as a whole is to slow down. With- hat downshift, the labor markets will continue to en, and inflation will creep higher.

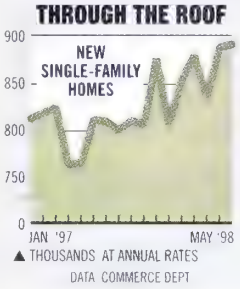
ARE HOUSEHOLDS shopping with such gusto? -solid fundamentals. Healthy job growth has ned the unemployment rate down to a genera- l low. The tight labor markets and low inflation, in are boosting real wages. In addition, financial itions have grown increasingly accommodating: s prices continue to climb, and interest rates re- very low.

wonder households are absolutely ecstatic about economic prospects. The Conference Board's June consumer confidence index rose to 137.6, the highest level in three decades, from 136.3 in May. Consumers' assessments of both current and expected conditions rose in June.

Buying patterns reflect those upbeat attitudes. Real consumer spending, adjusted for inflation, rose 0.4% in May, after increasing 0.2% in April. Those gains put second-quarter outlays on a path to rise at a 4% annual rate, following the first quarter's 6% surge. First-half spending will approach, and possibly exceed, the fastest two-quarter growth rate in a decade.

The key support under spending has been income growth. Job growth so far this year has slowed only a bit from its robust pace in 1997, and wages continue to accelerate. Real aftertax income rose 0.3% in May, after a 0.2% gain in April, and for the second quarter, it is on track to increase at an annual rate of about 3.4%. During the past year, real income has risen 3.8%.

HOME SALES ARE GOING THROUGH THE ROOF



The wealth effect from rising stock prices explains much of the disparity between the 3.8% yearly pace of income and the 4.5% growth rate of consumer spending. Equities now account for about 55% of all household financial assets, the highest proportion in the postwar era, and that ownership is spread across far more households. Higher stock prices, plus more than a full percentage-point drop in long-term interest rates during the past year, have given consumers an additional spending support that is not yet played out.

LOWER INTEREST RATES, as well as the host of other consumer pluses, are especially buoying home sales. Sales of previously owned homes rose 1% in May, to a near-record annual rate of 4.82 million, and May purchases of new homes hit a record. They increased 0.3% from April, to an annual rate of 890,000 (chart). Housing appears to have made a solid contribution to second-quarter economic growth.

Now, it looks as if strong demand may well power homebuilding all the way through the summer. A June survey of builders showed rising sales amid shortages of workers and buildable land, which is starting to push up home prices. The average price of a new home

in May rose 8.1% from a year ago, the largest annual rise in a year and a half. Strong demand assures that housing starts have not yet topped out.

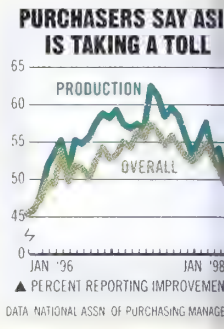
FOR THE SECOND QUARTER, two factors offset the consumer dynamo. First, a wider foreign-trade deficit subtracted from real gross domestic product growth, perhaps as much as the 2.7 percentage points it subtracted in the first quarter. Second, inventory accumulation undoubtedly slowed in the second quarter following an unprecedented buildup of $105.7 billion in the winter quarter.

Both are largely related to the Asian crisis, which so far has had its biggest impact on the manufacturing sector. Because of weaker foreign orders, overall bookings are slipping, and factory output has flattened. The downdraft continued in June based on the larger-than-expected decline in the purchasing managers' index.

The purchasers' composite index of industrial activity fell to 49.6% from 51.4% in May (chart). For the first time since July, 1996, the index slipped below 50%, meaning that manufacturing activity is contracting. The component indexes for production and employment fell sharply, while export orders continued to decline. The report said that purchasers gave mixed comments on business conditions, but it added: "Asian concerns still dominate their thoughts."

The Asian financial crisis has given the Federal Reserve some leeway in setting monetary policy beca the surging U.S. dollar has made goods inflation alm nonexistent, though service inflation is edging up. Fed's policy committee held rates steady at its June July 1 meeting. The Fed's next meeting is Aug. 18

But the Asian crisis, especially in Japan, may become a double-edged sword for the Fed later on if domestic demand does not ease back. Already, core consumer inflation so far in 1998 is running at a faster pace than it did in 1997. If demand stays strong, the Fed might be forced to hike interest rates at a time when such a move could unsettle the currency markets just as they begin to stabilize.



However, simply hoping that demand slows on own could be a risky strategy for monetary pol Consumers may not rein in their current spend spree without some prodding. The stick could take of many forms: a stock market correction, an Asian fluenced slowdown in employment, or higher inte rates. Unless households exercise some restraint, flation may sneak into the economy as insidiously a few extra pounds can gather around the waistli Neither result is welcome, and both are hard to sh

SPAIN

CRUISING INTO THE EURO ERA

Spain heads toward the January, 1999, launch of Europe's single currency with one of the fastest-growing economies in the euro area, and its economic performance should remain exceptional in the coming quarters.

In the first quarter, Spain's economy grew 3.7% from a year ago, the fastest annual clip in nearly eight years and well above the 3.1% euro-area average. In fact, Spain will outperform Europe for the second year in a row. After growing 3.4% in 1997, the government has revised its 1998 growth forecast to 3.7%, from 3.4%, and many private forecasters are doing the same. May inflation stood at 2%, interest rates are at record lows, and the public-sector deficit is set to equal about 2.5% of gross domestic product both this year and next.

The power behind growth is domestic demand, reflecting strong job growth and steep interest-rate cuts. Short-term policy rates are 4¼%, down from 6¼% in early 1997 and 9¼% in late 1995. Consumer spending, especially for big-ticket items, and homebuilding are leading the gains. Consumer confidence is at a new high, mainly because annual job growth has accelerated to 3.6% in April. Job gains in 1998 could exceed 400,000. Although Spanish unemployment, at 19.13%, is still the highest in Europe, that rate is a six-year low.

In order to bring Spanish interest rates into line with those in the euro area, at least one more rate cut by the Bank of Spain is expected. The euro convergence rate is likely to be in the 3.5%-t 4% range. The risk that the economy could overheat and push up inflation in 1999 will rise if the convergence rate is 3.5%, but even so, the risk is small. Wage growth continues to slow, and strong business investment is adding to production capacity. Also, the Asian crisis will offset some domestic strength and restrain inflation via lower commodity prices, especially for oil.

For now, strong growth and expected slight uptick in inflati in coming months will keep the BOS on the sidelines this summe but look for a rate cut by autu

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DETROIT

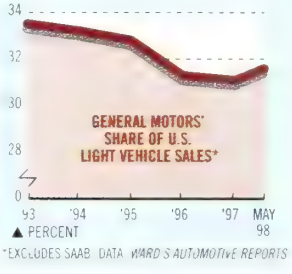
THE SHUTDOWN GM NEEDS?

It's a chance to clean house and downsize

How dramatically will General Motors Corp. change as a result of its latest showdown with the United Auto Workers? By late June—four weeks after workers struck two Flint (Mich.) plants and slowly brought GM's North American production to a halt—the auto maker was dropping tantalizing clues. Might the company use the shutdown to make fundamental changes—reducing plant capacity to match its reduced market share, killing off poor-selling models and, perhaps, getting rid of entire marketing divisions?

For investors eager to see such reforms, there are encouraging signs. A June 30 GM filing with the Securities & Exchange Commission stated that the company is "carefully reviewing future spending for products and facilities." That followed a series of internal memos leaked by GM that hinted at similar plans. And on July 1, Ronald L. Zarrella, GM's vice-president for sales and marketing, told reporters: "We may well take this situation as an opportunity to move up some future plans in terms of eliminating overlap in our portfolio."

STUCK IN REVERSE



*EXCLUDES SAAB DATA WARD'S AUTOMOTIVE REPORTS

WORRIED WALL STREET. Even if the auto maker isn't definitively signaling a major overhaul, many analysts and academics think it should. On Wall Street, where analysts are increasingly worried by the strike that has already cost GM $1.2 billion in net income, there's hope that this time the carmaker will go further than the long-expected cutbacks of a few more parts plants and a couple of car models. They would applaud a broad restructuring that would finally get GM in fighting trim. That would mean cuts in management and hourly ranks, and revamping products, marketing, and manufacturing. Furman Selz analyst Maryann N. Keller is eager for such a clean-sweep approach. "I would love it if they were making those decisions," she says.

Clearly, GM's decade-long "death by a thousand cuts" strategy of gradual downsizing isn't working. The company has not come close to its overall productivity goals. Its manufacturing inefficiency puts it at a $411-per-vehicle disadvantage to Ford Motor Corp., estimates Stephen J. Girsky, a Morgan Stanley Dean Witter analyst. And GM's declining market share in recent years has only made the need for lower costs more acute. At the same time, the never-ending cuts exact a high toll on labor relations. "Does GM honestly think there's going to be less pain in doing these things one at a time?" Keller asks. "It just makes the UAW madder."

True, getting all the bad news out at once might cause more labor friction in the near term. Analysts say GM needs to shrink hourly rolls by 40,000 to 50,000 workers out of 220,000 to match competitors' efficiency—hardly welcome news to the union and its members. But such moves are inevitable, and GM hopes to make many cuts through attrition over the next few years.

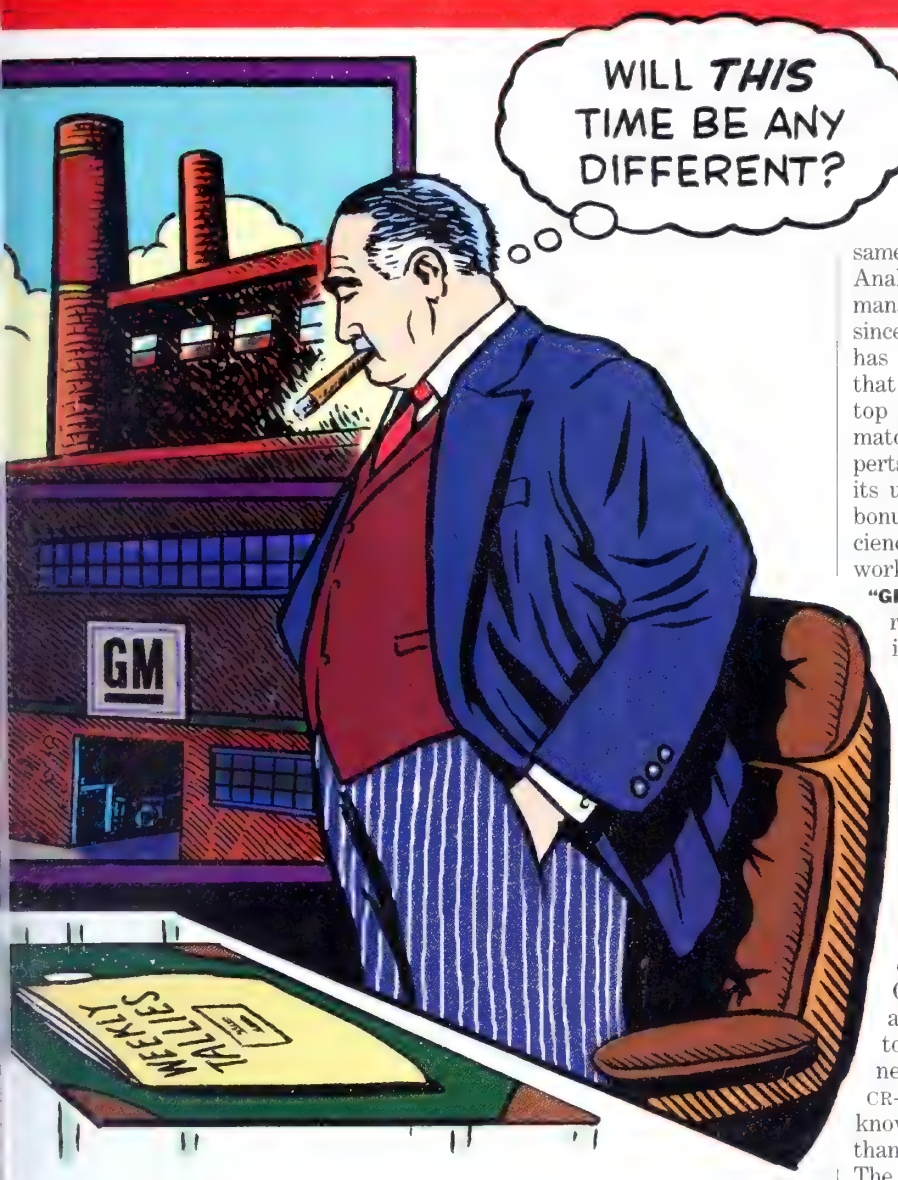
In some cases, workers whose plants are sold could be better off in the long run working for new owners, as for GM workers at Detroit Diesel and American Axle have discovered. Meanwhile, greater investment in new equipment for the remaining factories could improve productivity and preserve jobs.

A one-fell-swoop strategy could eventually result in better labor relations in the long haul. Says Trevor Bain, a University of Alabama management professor: "Whatever it is, they need to enunciate it clearly and let the union in on the secret, too." Workers will stop waiting for the other shoe to drop—and looking for real or imagined actions against them by management—if they believed the cuts were over and the rebuilding was beginning. It worked at Ford and Chrysler Corp., both of which downsized radically in the early 1980s and went on to rebuild solid profits.

WHATEVER HAPPENS IN THE STRIKE, OUTSIDERS SAY GM SHOULD...

...BOOST productivity by investing in new equipment, improving manufacturing, and eliminating up to 50,000 workers.

...SELL or close inefficient parts plants. Accelerate spin-off of the Automotive Systems operation.



ons once the bloodletting was over. Merrill Lynch & Co. analyst las Lobaccaro: "Once you get -sized and you don't need to lay e off any more, labor relations can ve dramatically."

d nobody should be surprised by GM plant closings. The company dely believed to be planning to or sell both Flint plants that K in June, as well as the Dayton plant that struck in 1996, and on June 30 to authorize another . "This strike may highlight a n of parts operations that have been living on borrowed time for quite a while and are finally going to be shuttered," says Lehman Brothers analyst Joseph S. Phillippi. Adds David E. Cole, director of the University of Michigan's Office for the Study of Automotive Transportation: "They'll probably clean the plate here. This is a crisis."

The auto maker is also expected to spin off all of its Delphi Automotive Systems parts maker, which had $26 billion in revenues in 1997. GM has said only that it is planning a partial spin-off. The sooner that happens, the better, analysts say. Likewise, GM is expected eventually to announce it will close at least one assembly plant—the Ste. Thérèse (Que.) factory that builds Chevrolet Camaros and Pontiac Firebirds that analysts say will be dropped. Wall Street would like to see the same discipline applied to salaried ranks. Analyst Girsky notes that GM's senior management ranks have ballooned 47% since its 1992 reorganization; rival Ford has reduced its top ranks by 37% in that time. GM would have to shrink its top management by 20% to 25% to match Ford's levels, he says. Labor experts say GM would gain credibility with its union workers if top management's bonuses were linked to the same efficiency standards being used to decide workers' fates.

"GRADE-B MOVIE." The most painful reductions could come by streamlining GM's marketing system. It has more than twice as many brands and 70% more U.S. dealerships than Ford, Girsky points out—even though GM's unit sales are only 19% greater. Analysts and investors say GM should stop trying to resuscitate dying divisions, and instead spend more on promising newcomers like Saturn Corp. "This is like watching a grade-B movie—you know exactly how it ends," says Keller. "Either Buick or Oldsmobile is going to have to disappear." Analysts also would like GM to add more high-profit trucks and new car-truck hybrids like Honda's CR-V and Lexus' RX300. Zarrella acknowledges that "we have more cars than we need, and not enough trucks." The strike may result "in getting out of those cars faster," he says.

GM's biggest problem is that it is chasing moving targets. When it comes to factory efficiency, "the competition is getting better faster than they are—and GM was already behind," says Phillippi. The company's U.S. market share has tumbled faster than it can close plants, and in June stood near 31%, down from 36% a decade ago. Even a rash of plant

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ATE excess capaci- ting assembly top candidate: Ste. Que., which makes g Chevy Camaro ac Firebird.

...SLASH unprofitable cars from portfolio and add high-margin trucks or car-truck hybrids. Invest more resources in rising brands such as Saturn.

...KILL OFF or merge at least one marketing division—Buick or Oldsmobile—to cut engineering and marketing costs and speed consolidation of dealer network.

...SHRINK inflated management ranks and tie senior management bonuses more closely to the same productivity standards being used to slash hourly ranks.

closings in the early '90s barely kept up with the declining demand. GM still has about 50% more assembly plants than Ford, which owns 24% of the market.

So how can GM level with the union about its capacity needs when management doesn't know how far market share will fall? Its executives will have to take a hard look at where sales are heading. For decades, they have declared that market share is about to rebound, only to be proven wrong. Early this year, market share tumbled below 29% for the second time in a year. A spring auto buying boom, fueled by a GM-led rebate push, helped the auto giant's share rebound temporarily. But Zarrella predicts that market share will be "well under 25%" in July and drop further if the strike continues. And some analysts believe the decline will continue longer term. Says Lobac "If you're doing long-term plannin GM, I think you have to look at market share."

That's tough medicine for GM union, and its investors. But dela the inevitable won't make it any bitter—and will likely prolong the

By Kathleen Kerwin in D

COMMENTARY

By Bill Vlasic

WHY IT'S TIME TO LAY DOWN THE PLACARDS

Time and time again, the United Auto Workers union has proven it can cripple General Motors Corp. But does the union's ability to match management's combativeness really serve its ends anymore?

The answer is no. Strikes can hurt GM's bottom line, but they can't change minds in its executive suite. So the two sides are locked in a battle of wills that generates little more than lost wages and red ink.

The union leaders have reason to be exasperated with GM. The auto maker's practice of whittling away at UAW jobs bit by bit engenders suspicion and mistrust. When GM threatens to sell a plant or withhold investment to force work-rule changes, the union fights back with the only weapon it has. "This strike is over GM's failure to keep commitments," UAW Vice-President Richard Shoemaker told BUSINESS WEEK. "They do it as a way of life."

The problem is, the UAW too often acts as if strikes are a way of life. GM has had 13 strikes in three years at a cost to date of $2.7 billion. For their trouble, the UAW leaders retained the status quo and not much more.

How to break the logjam? For starters, GM needs to tell the truth. It must face up to the depth of its problems, from its shrinking market share to its slim profit margins. Then, if it believes it has to cut, say, 50,000 jobs, it should tell workers plainly and clearly. "If I were running GM, I'd figure out where I'm going to be in five years and spell it out," says retired UAW President Douglas A. Fraser.

Once GM puts its cards on the table, the UAW also needs to deal. The UAW won't say so, but it may be willing to give ground on job cuts for the sake of productivity or market-share gains while standing pat on another issue: the exodus of jobs to Latin America and Asia. That means UAW President Stephen P. Yokich might be able to use GM's slim-down strategy to his advantage. He could agree to the export of low-tech parts jobs in exchange for a GM commitment to put new vehicles in aged U.S. assembly plants. Shoemaker says the planned shutdown of the Buick City plant in Flint is a major sore point. Then make a deal: The UAW loosens its grip on parts jobs in exchange for Buick City getting a new sport-utility vehicle.

The union also wants to expand its membership. It could work with the carmaker on that as well, giving GM the right to move, sell, or close parts plants in return for GM support of UAW organizing efforts at outside suppliers. Ford Motor Co. does it—and its profits and pr ductivity don't seem t suffer because it buys from union shops.

FUTILE

GM has endured 13 strikes in 3 years. All the UAW has to show for it is the status quo

GM's most fundamen tal problems have to with its cars. Buick City workers aren't t blame if the cars they make aren't cutting it. But the union needs to help its biggest employer get back on track. And if you believe Shoemaker, the UAW is willing to do so. "All the auto companies are trying improve productivity and we under stand that," he says. "We've never told GM that we wouldn't help them become more competitive."

So give the picket signs a rest. Both sides need to do more than feud over work rules in a stamping plant in Flint. GM and the UAW hav big problems, and strikes produce small solutions.

Vlasic covers the UAW in Detroit.

COMMENTARY

By Howard Gleckman

SPEND THE DOUGH ON SOCIAL SECURITY AND THE TAX CODE

ongress seems determined to blow a once-in-a-generation opportunity. After a decade of fis- paralysis, the surging economy is out to hand Washington billions of llars it could use to tackle two ming and vital projects: a long-de- ed tax-code overhaul and the re- m of Social Security. Converting new systems will be expensive—least at first. So now's the time en Washington should bank any dget surplus to help pay for se dramatic reforms.

But alas, politicians on both es of the aisle are work- overtime to spend the gh on new programs l tax cuts. In a couple weeks, the Congres- nal Budget Office is ected to estimate an pressive $65 billion sur- s for fiscal 1998. Even t's not enough for Wash- ton. Already, House Speak- Newt Gingrich (R-Ga.) has n putting heavy pressure the CBO to come up with n larger surpluses.

Despite warnings from bud- experts, most pols assume bucks will be there, thanks a huge influx of tax dollars. course, that includes pay- l-tax revenues, which are posed to be reserved in the ial Security Trust Fund. clude that, and the feds will l the fiscal year on Sept. 30 h roughly a balanced bud- . Says ex-CBO director bert D. Reischauer: "There lly isn't a surplus."

GING COFFERS. Nonethe- s, budget accounting, Capi- -style, is quite different. th visions of ribbons to cut l tax loopholes to open, makers are spending the ney even before it arrives (table). far this year, Congress has enact- a $200 billion, six-year highway- l-mass-transit bill. Sure, the na- n's roads and bridges need work. t Washington is boosting highway ding to the states by a staggering %. The states hardly need more h: Their coffers are so bloated t they've cut taxes by $1.5 billion the past six months.

That's nothing compared to what Washington still has in mind to give away. Republicans have resisted Clinton's efforts to spend an additional $65 billion over five years for education and health care. Not out of fiscal restraint, mind you. They prefer giving $12 billion over 10 years in tax credits to parents with kids in private schools. The GOP's reform of the Internal Revenue Service will cost a further $13 billion.

And Congress hasn't even written a tax bill yet. When it goes to work on that in September, the centerpiece will be marriage-penalty relief for two-earner couples. The 10-year price tag for this voter-friendly measure: up to $150 billion.

THE MANY WAYS CONGRESS COULD SQUANDER THE SURPLUS

(All estimates are for 10 years, except the highway bill, which is for 6 years)

CONGRESS HAS ALREADY PASSED:

- A $200 billion highway bill
- A $13 billion IRS reform
- $12 billion in tax breaks for K–12 education costs

AND IS WORKING ON:

- Removing the tax code's "marriage penalty"—at a cost of $150 billion
- A program to curb teen smoking and shift tobacco farmers to other crops
- A $4 billion program to fix the government's Year 2000 computer problems

DATA: BUSINESS WEEK, CONGRESSIONAL BUDGET OFFICE

Why spend that much for one more Band-Aid on the existing tax code at a time when an overheated economy hardly needs stimulus? Marriage-penalty relief won't make the code less complex, or much fairer. And it won't encourage savings. Real tax reform that lowers rates and closes loopholes would. To do this in a politically palatable way, Congress will probably have to ease any transition by phasing out rather than killing popular tax breaks. And that will cost.

SLAB OF PORK. It's the same with Social Security. One popular idea is to let individuals divert nearly a quarter of their payroll taxes into personal savings accounts. But if Congress adopts such a system, it will have to make up for the lost revenues now used to support current retirees. Where will Congress get it? Conveniently, the shift to a new Social Security plan would cost about $65 billion a year for at least five years—close to the windfall Congress expects from the booming economy. "We could use the surplus to ease the transition," says former CBO Director Rudolph G. Penner.

It would be simple to reserve the short-term surpluses to finance these anticipated shifts. Failing that, Congress could pay down a bit of the $5.5 trillion national debt. That would ease pressure on Social Security in the decades to come by reducing interest costs. Other rates might fall as well, benefiting everyone.

Sure, it's election time. But polls show that voters are happy with the economy. And they're not clamoring for another nickel-and-dime tax cut or slab of hometown pork. They do want a better tax code and a secure Social Security system. This could be one of those rare years when sound policy is good politics.

Senior Correspondent Gleckman follows the budget wars from Washington.

HEALTH CARE

MEDICARE'S SQUEEZE PLAY

New cost-cutting rules are socking a host of care providers

On June 30, the Visiting Nurse Association of Southeastern Indiana let go the last of its 175 employees and cleared out its offices in Jeffersonville. Facing sharply lower Medicare payments, agency managers felt they could not stay in business. "It just was not possible to cut enough to operate at those levels," says former Executive Director N. Bennett Jesse.

There's more pain where that came from. Last year's Balanced Budget Act laid the groundwork for a sweeping overhaul of Medicare, with the promise of $115 billion in savings over five years. That, says Paul W. Dennett, vice-president for health policy at the Association of Private Pension & Welfare Plans, "has the potential to cause tremendous change in American health care."

Now, the health-care industry is starting to sense just how profound—and costly—those changes will be. Already, hospitals are enduring a freeze on Medicare reimbursements for inpatient care, while a new payment mechanism for health maintenance organizations has left many insurers grateful to get even 2% annual premium increases on Medicare coverage. Hardest hit, though, are so-called post-acute-care providers—nursing homes, home-health services, and others that handle patients after they leave the hospital.

"WIDE-OPEN MARKET." Such providers were sitting ducks for budget-cutters: Their reimbursements have soared since 1990—fivefold for home-care agencies—as they have taken on more patients who have been discharged sicker and sooner from hospitals. Reports of mismanagement and abuse, especially in the little-regulated home-health industry, didn't help. "It's been a wide-open market—too open," says Stephen M. Wood, a national director at benefits consultant Towers Perrin.

The new law reduces home-care reimbursement 25% to 40% by imposing lower per-visit price ceilings and an annual per-patient benefit limit. As a result, the National Association for Home Care says some 800 providers have closed or sold out since last October. On June 29, Olsten Corp., the largest home-health provider, said it will close 60 of its 400 offices and take a $23 million charge to get costs in line with the new system.

Now, nursing homes face similar pressures. The Health Care Financing Administration, which runs Medicare, on July 1 put in place a "prospective payment system" that sets predetermined, per-day rates based on the condition of patients and the care needed, adjusted for regional differences—rather than paying for actual costs plus overhead.

Some executives argue the strain will squeeze fat from the system. "Nursing homes' cost of care has been artificially inflated for years" because of cheap staffing, says Timothy E. Foster, CEO of NovaCare Inc., which supplies homes with therapists. Smaller companies will have the most trouble adjusting—but even big ones are buckling. Vencor Inc., a 303-home chain, blamed Medicare changes when it announced on June 18 that it would cut 1,000 jobs and delay construction of a $60 million headquarters in Louisville.

Beverly Enterprises Inc., the No. 1 chain, will lose millions from rate cuts. But the company may do O.K.: Its new payment system is based on care costs in 1995, a year when Beverly's were quite high. Since then, the company has consolidated purchasing and saved $50 million by bringing more physical therapy in-house. "We expect to be rewarded by prospective payments for our efficiencies," says a spokesman.

Ultimately, industry executives and analysts expect the new system to prompt more consolidation—with a few giants emerging as dominant. How will that affect patients? In nursing homes they may get longer stays since operators collect revenue for each day they keep a bed filled. But home-care clients could get fewer visits. In Fort Worth, 77-year-old Eva Cohen, paralyzed by a stroke, has just been told that her home-care agency probably can't afford to provide the 60 days of visits Medicare has authorized—or supply as many diapers as she needs.

Such cuts could drive more patients back into hospitals or, when they run out of money, onto Medicaid. But the budget-cutters are determined to put a tourniquet on Medicare costs.

By Keith H. Hammonds in New York with Stephanie Anderson Forest in Dallas and Mike McNamee in Washington

OFFICE VISIT: *Insurers reward smaller premium hikes*

THE BUDGET EFFECT

Medicare cuts from the 1997 Balanced Budget Act

HOSPITALS Reimbursement frozen in 1998 and curbed thereafter; but institutions are freed to create Medicare HMOs that compete with insurers.

HMOs Payment increases cut by $20 million over five years; but more equitable rates make HMOs viable in certain areas where reimbursement had been low.

HOME HEALTH Spending is slashed with lower caps on per-day payments; standardized rates may come in 1999.

NURSING HOMES New, lower rates are based on assessment of patients' condition and treatment. Operators must submit patient assessment data regularly.

COMMENTARY

By Susan B. Garland

FINALLY, A CORPORATE TIP SHEET ON SEXUAL HARASSMENT

A chill wind ran through corporate boardrooms on June 26 as the Supreme Court handed wn two landmark rulings on sexu- harassment. The justices ruled at companies can be held liable for upervisor's sexually harassing havior even if the offense was ver reported to management. And e high court said an employer can liable when a supervisor reatens to punish a work- for resisting sexual mands—even if such threats n't carried out.

At first blush, the decisions nd like a prescription for a flood new lawsuits. But take a deep ath, Corporate America. There's ually some good news for employ- in the fine print of the justices' isions. For the first time, the rt is giving companies guidelines how to protect themselves inst sexual-harassment charges. ere are no guarantees, of course. t, if companies get serious about mping out harassment and sus- the efforts, they can be better tected in court—and their em- yees can feel safer at work.

FIRMATIVE DEFENSE." The rt's advice: Develop a zero-tol- nce policy on harassment, com- nicate it to employees, and en- e that victims can report ses without fear of retaliation. mployers should l safe as long as y are vigorous," s Susan R. isinger, senior e president at Society for Hu- n Resource nagement. So even though court has adened the con- ons under which s can be ught, a company deflect sexual- assment charges with a two- nged "affirmative defense," the tices said. First, it must take asonable care to prevent and cor- t promptly any sexually harassing avior." Then, it must show that employee failed to use internal cedures for reporting abusive behavior. This defense won't work when a supervisor retaliates against a worker for resisting sexual advances. But it will protect a company from charges that it tolerates a hostile work environment.

That means if a company has a strong antiharassment policy and a worker doesn't report an incident of sexual harassment and later sues, an employer can use that as part of a defense. Says Boston employment lawyer Marilyn D. Stempler: "The court places obligations on employers to set up policies, but it also places an obligation on the victim to come forward."

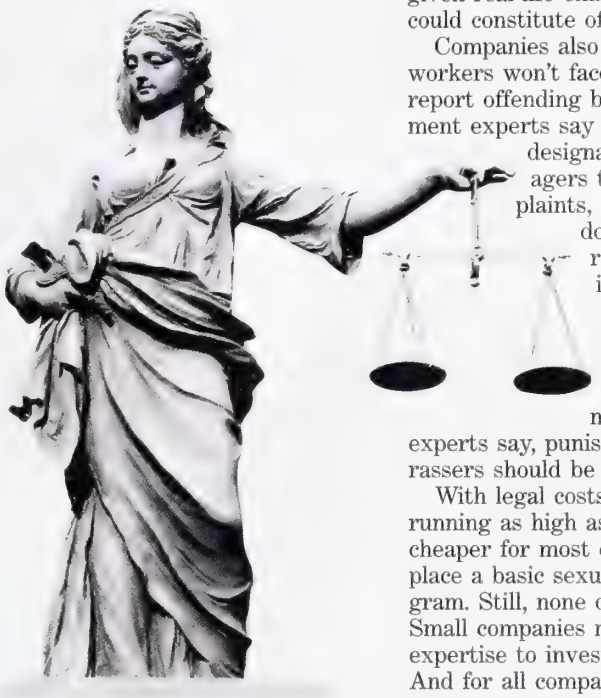
Not every nuance is spelled out. The court didn't describe, for example, what constitutes "reasonable care" for preventing or halting harassment. But employment consultants say companies should now publicize the policies as aggressively and regularly as possible—in handbooks, on posters, in training sessions, and in reminders in paychecks. Line supervisors and employees should be given real-life examples of what could constitute offensive conduct.

Companies also must ensure that workers won't face reprisals if they report offending behavior. Employment experts say companies should designate several managers to take these complaints, so that employees don't find themselves reporting to their immediate supervisor—very often the abuser. Managers should be trained in sexual-harassment issues. And, experts say, punishment against harassers should be swift and sure.

With legal costs for a jury trial running as high as $200,000, it's cheaper for most companies to put in place a basic sexual-harassment program. Still, none of this is simple. Small companies may not have the expertise to investigate complaints. And for all companies, once a complaint is filed, employers will face increased pressure to sort out who's telling the truth and to mete out serious punishments.

But by both expanding a company's potential liability and offering a valid defense, the Supreme Court noted that it was giving employers "an incentive to prevent and eliminate harassment." That means companies can protect themselves while doing right by their workers. That's an opportunity for Corporate America, not a threat.

Garland covers legal affairs from Washington.



THE COURT STRIKES A BALANCE

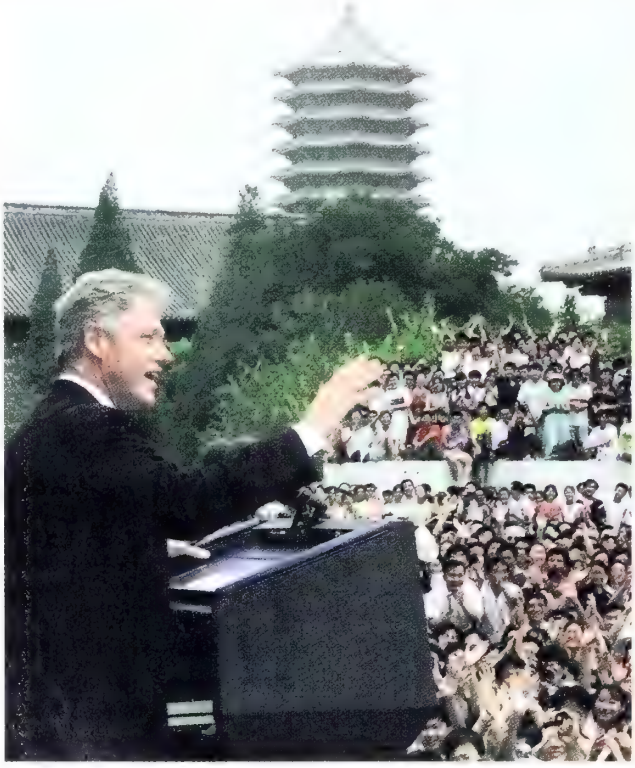
EMPLOYEES GAINED BECAUSE THEY CAN:	EMPLOYERS GAINED BECAUSE THEY CAN:
• File a harassment complaint even if they don't suffer retaliation after resisting a supervisor's sexual advances	• Protect against sexual harassment charges if their company has a zero-tolerance policy that is widely observed
• Hold an employer liable for a supervisor's harassment even if top management doesn't know about it	• Win a case if the employee does not report the offenses to a supervisor who is responsible under the company program

COMMENTARY

By Dexter Roberts & John Templeman

THE U.S. AND CHINA: NOW FOR THE FOLLOW-THROUGH

Bill Clinton's spin doctors had a field day in China. The President's gamble of talking about human rights paid off handsomely, disarming his domestic critics and bringing forth an unprecedented degree of openness from the Chinese. Live, uncensored TV feeds of Clinton's debate with President Jiang Zemin on such issues as freedom of expression, or of Beijing University students peppering Clinton with questions on human rights and U.S.-Taiwan policy, showed the President at his best—and a distinctly new and human face of China.



Behind the media hype, though, there was real substance. President Clinton finally laid the basis for a normal relationship with China. He sent a strong signal that China, and not Japan, will be America's main interlocutor in Asia in the 21st century. Neither the President nor his Treasury Secretary, Robert E. Rubin, for instance, even bothered to stop over in Tokyo. And on June 30, Clinton used Beijing's so-called "three no's" formula to reject Taiwan's independence. This politically significant act could lay the groundwork for disentangling the U.S. from an explosive issue.

CALCULATED RISK. With Asia battered by widespread economic meltdown and shaken by political events such as nuclear weapons testing by India and Pakistan, detente with China couldn't be better timed. But the summit's success is just a beginning. It's one thing to discuss Tibet or freedom of expression in the Chinese media—and quite another to get Beijing to make real changes. Without consistent diplomatic follow-through, something the Clinton Administration often finds hard, any advances risk being transitory.

> Clinton sent a strong signal that China, and not Japan, will be the U.S.'s main interlocutor in Asia in the 21st century. Detente couldn't be better timed

Both leaders had much to gain politically from the summit. President Jiang emerges from the shadows cast over him by the bold economic reform agenda of Premier Zhu Rongji. He now appears as a world leader and has won recognition for China's global role. Consequently, his government is less exposed as reforms enter the painful phase, unemployment balloons, and growth slows. Also, by showing that talking gets results on issues like Taiwan, he will find it easier to handle hard-liners such as the People's Liberation Army generals who still prefer to rattle sabres across the Strait of Taiwan.

What President Clinton came away with is less tangible, but equally important. The odds are China has finally been coaxed out of its long isolation and is now prepared to start acting as a responsible world citizen. With Asia's delicate economic health, China's commitment not to devalue its currency is significant and extremely helpful—especially as Japan dithers again over pulling its weight in a crisis. By softening the xenophobic edge of China's take on the world, Clinton may have done more to help U.S. business than the official agenda—short on commercial events—would suggest.

The White House, mainly for domestic political reasons, took a calculated gamble in not dialing for dollars in Beijing. Clinton's refusal to take along a retinue of corporate chief executives angered those who had hoped to snare contracts. In the long run, though, business may be better served by the less direct approach. The important issue is not a few trophy deals now but rather a steady and irreversible commitment by China to the global economy and open markets. China's signature on a World Trade Organization admission protocol offers more future possibilities than one on a contract now.

Business has much to gain from a steadier, more normal Sino-U.S. relationship. Presidents Clinton and Jiang have laid its foundations. They need to be built on promptly, otherwise they will start to crumble.

Roberts covers China from Beijing and Templeman is BUSINESS WEEK's senior international political editor.

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FALLEN DEMAND: *Schulman i eyeing markets outside of As*

Besides developing their d distribution networks, mininati als are also insisting on ba backed financing agreements to duce losses on receivables. effect, they are abandoning "o account" financing in which a b ness relies on its customers to up in good faith. These new quirements are aggravating ready tight financing condition Asia but provide some protec for U. S. companies from los when customers can't pay.

SHIFTING FOCUS. But most im tant, smaller companies are r recting their efforts from Asi healthier markets in Central South America and Europe. your buyers are taking more t [to pay], then a small company to find buyers elsewhere," s Eileen Cassidy, director of internati trade for the Small Business Admi tration, which in 1997 saw 30% o export capital go to companies tradin Asia. But owing to the Asian crisis, sidy expects Latin America to move in the standings and Europe to take No. 1 slot by the end of 1998.

The switch began in October, 1 when many small companies began l ing to Mexico or Brazil rather than Ta land or Singapore for growth. One sult: The construction industry rep sales to Mexico grew 143% in the quarter over the same period a year

Producers of everything from p tion control equipment to candy are s ing their focus. Take Marc Schul president of Eli's Cheesecake C Chicago. He's been selling cakes to A restaurants and hotels, but demand slipped. So he's fine-tuning his distrib system, while eyeing other region take up the slack. "The pace of opp nities [in Asia] is slowing down," he "But I wouldn't say we're walking a

Who can afford to? "If Asia w small market, you'd walk away. B

THE GLOBAL ECONOMY

TURNING SMALL INTO A BIG ADVANTAGE

Agile exporters to Asia are quickly adopting survival strategies

Let the billion-dollar multinationals fret about the strong dollar, the bad loans made by Japanese banks, and the recession that holds Asia in its grip. Smaller U. S. "mininational" exporters—toolmakers, dredging companies, even companies peddling cheesecakes to restaurants in Thailand—are convinced that the surging dollar and the Asian economic crisis, though painful, won't derail their global growth.

True, like their larger brethren, small U. S. exporters are seeing their customer base—often companies with ties to big-ticket government infrastructure projects—dry up in Korea, Malaysia, Thailand, and across the Pacific Rim. And their products are getting too pricey compared with those of overseas rivals. But anecdotal evidence suggests that the mininationals are moving swiftly to offset the damage. "[Overall] manufacturing exports haven't slowed from plus 10% to minus 10%. Those exports are still growing a little bit," says Rosanne M. Cahn, chief economist in Credit Suisse First Boston's equity department. "We've had a global recession in the '90s, and this is nowhere near that."

Viewing Asia as a short-term problem, many companies with sales under $500 million are developing a variety of coping strategies—mostly aimed at avoiding Asia or restructuring relationships there to provide protection against potential bankruptcies of Asian partners. For example, Chicago's Aerotek International, which makes hydraulic hose repair systems used in industrial construction and mining, cut 50 of its Asian distributors, says President Larry J. Peterson. Aerotek, which gets 75% of revenues from international sales, then set up a company in Singapore to market its product. The switch lets it weed out financially weakened customers and avoid possibly unstable middlemen.

SOARING DOLLAR? NO PROBLEM

Small and medium-size businesses are adapting by:

EXPANDING assembly work they do in Asia to take advantage of the cheaper labor

SHIFTING marketing efforts from Asia to Latin America and Europe

GETTING more aggressive on collections; insisting o letters of credit from banks and insurance to guarantee payments

TAKING advantage of lower costs for raw materials ranging from oil to resin

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constitutes nine countries with 500 million people and a GDP of nearly $1 trillion," says Ernest Z. Bower, president of the U.S.-ASEAN Council.

Small manufacturers are also aware that while they can reduce their presence in Asia, they can't avoid competing with Asian rivals and their heavily discounted products. In Latin America, toolmakers are seeing 15% to 20% price cuts on Korean and Japanese products. "People who are optimistic about export opportunities seem to forget about the strength of the dollar," says Andrew B. Bernard, associate professor of economics at Yale University's School of Management.

And to be sure, scores of manufacturers are licking their wounds. Some of the most badly wounded are makers of electronic components, such as Interconnect Devices Inc. in Kansas City. President Edward Schifman says sales to Asia made up 35% of his revenues last y but business in Korea alone is off 95% don't see it getting any better. I'm v pessimistic," he says. While Asia's pendent electronics makers can't fi place to hide, other mininationals keeping one step ahead of the crisis

By De'Ann Weimer in Chicago, Richard A. Melcher in Chicago, D Case in San Francisco, and bu reports

ENVIRONMENT

EL NINO'S NASTY SISTER

La Niña could cause U.S. farmers real heartache

For much of this year, Al Nino, a 75-year-old resident of Nipomo, Calif., has gotten angry phone calls from people who wanted to know why he had disrupted the weather. "It's happened at least a half-dozen times," says Nino. He should be getting a rest soon. "El Niño is dead. It's over," says David Adamec, a research oceanographer at NASA/Goddard Flight Center.

But anybody with the surname Nina might consider getting an unlisted number. While El Niño is waning, a new weather pattern is forming in the Pacific. Called La Niña, or little girl, it's the flip side of the El Niño-Southern Oscillation cycle, which involves warmer than normal temperatures in the eastern equatorial Pacific. La Niña is associated with cooler ones and can lead to volatile weather patterns, including more violent hurricanes.

DROUGHTS, FLOODS. It is not unusual for La Niña to follow El Niño. Between 1986 and 1996, there have been four El Niños, and two were followed by La Niñas. Now, observations by the National Oceanic & Atmospheric Administration and NASA both suggest that La Niña is moving in. Indeed, the wildfires in Florida are partly due to dry weather from the coming La Niña, say scientists. "The question no longer seems to be will we have La Niña but how strong will it be," says Adamec.

The effects will be felt mostly in the fall and winter: dry weather in the South and the Central Plains, unusually wet weather in the Pacific Northwest, and cold weather in the Upper Plains and the Northwest. Unusual droughts and floods caused by La Niña could harm agriculture, and a severe hurricane season could cost insurers.

STORMY WEATHER

The average season produces six hurricanes. During the last La Niña season, there were 11—and that was a relatively weak La Niña

Still, the economic impact may not be a disaster. Even though the latest El Niño was the climate event of the century, improved forecasting meant that it caused less damage than the 1982-83 El Niño, which inflicted $13 billion in damages worldwide, says Rodney Weiher, NOAA's chief economist. The expectations for La Niña are even milder.

There are ways to minimize La Niña's damages. Farmers, example, may be able to es the worst effects by post ing or moving up planting. because forecasters are st gling to predict the severit the upcoming La Niña, t might not know enough in to protect some of the key mer crops. "The period betv July 10 and Aug. 10 is cri for the corn and soybea says Steven Bruce, a br with ED&F MAN Internati because that's when they pollinated.

HIGHER PRICES. La Niña of brought hot, dry condition July and August, leading drop in crop yields. The bean yield, for example, 16% below what had been pected. During the 1988 Niña, soybean yields fell below expectations. Dry we er in the Midwest and in fornia this year could raise prices of corn and soybe which could be a boon for modity traders but woul hard on farmers.

The bigger risk from La is that it encourages hurric On average, the season—w lasts from June until November— duces six hurricanes. During the La Niña season in 1995 there were and that was a relatively weak La N "The magnitude of losses possible a whole El Niño season... makes a comparison to a single hurricane," David Malmquist, a geologist at Risk Prediction Initiative, a Berr think tank launched by 10 insur companies to develop more accu hurricane forecasts. A single hurr can easily cause $10 billion to $20 b in damages. In 1992, Hurricane An caused losses of $16 billion and w out many small insurers.

Niño or Niña, the weather pat born in the Pacific will continue to a big role in world economies.

By Nellie Andreeva in New

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In Business This Week

EDITED BY KELLEY HOLLAND

PACKARD BELL RINGS IN A NEW CEO

PACKARD BELL CEO BENY Alagem resigned on June 30, citing fundamental differences with the privately held company's two major shareholders, Japan's NEC and France's Groupe Bull. The company intends to name Alain Couder, now COO of Groupe Bull, as its new CEO. Alagem had been under pressure to turn around the struggling computer maker, which has been losing money for years, so that it could go public. Sales last year were $4.2 billion, down from a peak of about $7.5 billion in 1996, when Bull's Zenith brand and NEC's operations outside of Japan and China were folded into the company. Packard Bell NEC, which once sold half of all home computers in the U.S., has seen its share of the retail market fall to 34%.

CLOSING BELL

BARELY DOING IT

Has the swoosh lost its whoosh? On June 30, Nike announced a fourth-quarter loss of $67.7 million on a 3% drop in sales, to $2.3 billion. But investors spy a glimmer of hope: Excluding a restructuring charge, Nike earned $11.8 million, or 4¢ a share, 1¢ more than analysts' estimates, thanks to reducing an inventory glut. So Nike's stock rose 3⅜ on July 1, to 52⅛. Still, it faces a marathon run back to prosperity: Asia's crisis and slow U.S. demand mean real earnings growth is unlikely before next spring.

DATA: BLOOMBERG FINANCIAL MARKETS

A TOXIC PRIVATIZATION?

WILL THIS IPO BE RED-HOT—or radioactive? The Treasury Dept. is selling the government's uranium-enrichment operations, an enterprise known as U.S. Enrichment, in an initial public offering it hopes will raise between $1.35 billion and $1.65 billion—making it one of the largest privatizations in U.S. history. But industry insiders are mixed as to whether U.S. Enrichment can get the price it wants. Critics say the company is saddled with aging technology, declining demand, and a number of ongoing government mandates that could crimp its bottom line. For its part, the company is betting that a new laser-based technology could dramatically boost its profits in coming years.

IN THE BIDDER'S BOX FOR SAKS

WHO WILL BUY SAKS FIFTH Avenue? Retail experts say Saks's own chief executive, Philip Miller, is a possible bidder. They say Miller, a seasoned exec who once launched an unsuccessful leveraged buyout offer while at Marshall Field, is a prime candidate to gather investors and make a bid. "I think that's a good possibility," says Kurt Barnard, president of Barnard's Retail Trend Report. Miller declined to comment. Other possible buyers for the store—whose current owners want out—include Neiman Marcus and Midwestern department store chain Proffitt's, say retail industry sources. Both retailers declined comment.

HEADLINER: FRANK QUATTRONE

TEAM QUATTRONE RIDES AGAIN

Silicon Valley is used to surprises. But it was still a shocker on June 30 when high-tech investment banker Frank Quattrone announced that he and his top two lieutenants were leaving Deutsche Bank Securities to join Credit Suisse First Boston. Less than four months ago, Quattrone vehemently denied that he was shopping his team around. The 42-year-old banking superstar even assured Deutsche clients in a March letter, "We are here to stay."

The about-face raised concerns among some in Silicon Valley. "Quattrone is the Bill Clinton of the securities business," said one Valley insider. Quattrone declined commen This isn't the fi time Quattrone has upset the tight-knit high tech banking community. In 1996, he and a handful of colleagues abruptly left Morgan Stanley to launch a high-tech sho at Deutsche—where they got unprecedented multi-million-dollar pay packag This latest shuffle raises questions about Deutsche future in Silicon Valley, a it's already sparking bidding wars among banks f top talent in tech bankin

By Linda Himelst

IT'S LOOKING LIKE GOOD NEWS CORP.

FOR MONTHS, STOCKHOLDERS leaned on Rupert Murdoch to do something about News Corp.'s sluggish share price. On June 29, they got their wish: Murdoch unveiled plans to spin off News's sexiest assets into a company called Fox Group. Those assets include the Twentieth Century Fox studio, his Fox Network and TV stations, and the L.A. Dodgers. Analysts said the move should boost News's stock price. And, in selling 20% of Fox Group to the public by yearend, Murdoch will raise up to $4 billion.

BOEING PRODUCTION TAKES WING

WITH A RECORD 61 DELIVERIES in June, Boeing is finally starting to recover from its production problems. Factory snafus forced it to shut down lines and take more tha billion in charges in the nine months. But now aerospace company expec deliver an average of planes a month for the of the year, compared wit a month on average in first half. Aerospace ana Joseph Campbell of Leh Brothers says it's goo know Boeing can get planes out the door, but n must boost its net profit gins, currently under 3%

ET CETERA . . .

- The FDA approved a sweetener, and PepsiCo use it in diet soda.
- Advanced Fibre Comm cations lost some $1.6 billi value after its CEO quit a issued a profits warning.
- Sun Microsystem acquiring Java softw highflier NetDynamics.
- Midwest merger m Star Banc is buying Fi for $7.2 billion.

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TED BY OWEN ULLMANN

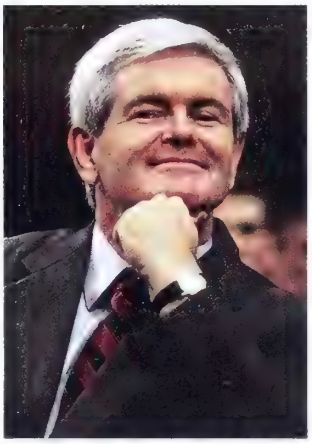
EWT MAY HAVE PUT FAST-TRACK N AN EVEN SLOWER BOAT

Newt Gingrich trying to save fast-track trade legislation? is he sending it on a slow boat to oblivion? may have looked like a masterstroke on June 25, when House Speaker tried to enlist American farmers in a aign to revive the stalled fast-track trade bill. A dozen from fence-sitting rural lawmakers might be enough to the measure to President Clinton this fall. And be-, Republicans could show Corporate America that they as much about business' agenda as they do about the rns of social conservatives.

t fast-track supporters may wind up dis-nted anyway. They fear Gingrich's gambit ned less at securing passage of the trade sal than at exploiting differences on trade g the AFL-CIO, congressional Democrats, he White House. Because House Demo- depend on labor for money, volunteers, otes, they are less apt to embrace fast- —just as the AFL-CIO is setting up for ll campaign. "The agriculture and business sts that are committed to fast-track say don't want to be a pawn in an effort to it if the primary motive is just one of s," says Representative Calvin M. Dooley lif.), a fast-track supporter who sits on louse Agriculture Committee.

at makes passage iffy right before the mber election and could reduce fast-track's es for early 1999, the current target. The reason: De- its who might support the bill after the election may be l into an early declaration of opposition—which would be rassing to reverse next spring. "[Gingrich] could be do- ore damage than good by locking in anti-fast-track without gaining more support," frets free-trader Edith lson of the Progressive Policy Institute.

e worry is understandable. The Speaker is known for ging legislative surprises for partisan advantage. In-deed, he disclosed his fast-track plan after crashing a bipartisan news conference of House Agriculture Committee members who were expressing alarm about declining farm exports and sinking commodity prices. The group's main goal was to push for House passage of an additional $18 billion for the International Monetary Fund. Gingrich upstaged the group by promising quick House action on the IMF bill and more: fast-track, pressure on Europe to reduce farm subsidies, renewal of China's trade status, and an exemption from trade sanctions for farm-export finance programs.



GINGRICH: *Farmers' friend?*

BAD TIMING. Farmers, after all, are feeling particularly vulnerable. Farm exports in the first quarter of 1998 were down 2% from the same period in 1997. Worse, world commodity prices have dropped because of high crop yields. For U.S. farmers, the timing is terrible. Congress began phasing out their subsidies in 1996 in return for a promise to boost exports with an aggressive market-opening trade policy. "Everything was going gangbusters, but now—kaplooey," laments Daniel Lipton of the American Farm Bureau Federation.

Gingrich has other plans to relieve angst in the Farm Belt—traditionally GOP turf. One idea is to give congressional farm committees an expanded role in supervising Administration trade negotiators under fast-track. But he has done none of the other spadework necessary to cultivate fast-track support. Administration officials haven't been asked to mount the Herculean effort required to boost Democratic supporters from last year's 45 to a needed 70. And the bill still contains curbs on labor rights and environmental protection that offend moderate Democrats and Republicans. That shows the Speaker may be more concerned about holding on to the GOP's thin margin in the House than on passing a trade bill this year.

By Paul Magnusson

CAPITAL WRAPUP

GOP's GIFT TO THE DEMS

erhaps the Democratic National mittee should send thank-you s to Newt Gingrich and Indepen- Counsel Kenneth Starr. They're main reason, says the DNC, that party has nearly dug itself out of debt. Legal bills in connection the '96 fund-raising scandal left DNC $17 million in the red last . But as of June 30, the party it has whittled down its debt to illion. DNC officials say a back- against Capitol Hill Republicans and Starr's investigation of President Clinton has prompted party stalwarts to open their checkbooks. Says DNC spokeswoman Melissa Ratcliff: "Ken Starr and Newt Gingrich are a winning formula for the Democratic Party." Other reasons for the better bottom line: cost-cutting management reforms, a booming economy that has made contributors more generous, and Clinton's high poll ratings. Although Republicans still have a big money edge, the DNC says it'll be competitive come the fall elections.

RUN, JESSE, RUN?

▶ Jesse Jackson isn't ruling out a White House run in 2000. "I've not made that decision," he tells BUSINESS WEEK. In the meantime, between trips to Presidential testing grounds in Iowa, Jackson urges companies to invest in what he terms the most promising emerging market: America's inner cities and rural areas. He plans a July 15 powwow in New York to devise incentives for investments in poor areas, with government subsidies to offset the risks.

.WORK THE
WEB.

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LOvE AND DEAtH in Akron, Ohio.

The pharmaceutical sales rep is dead. Exhausted. Dog meat. Lying on the bed, he thinks about his day. His flight was delayed two hours. He went into the club lounge and connected to [1](the company intranet to review shipping status on pending inventory) via the Web. He [2](e-mailed) his customers to inform them their deliveries would arrive early. He lugged his carry-on to the gate. He wedged himself into a coach seat. He arrived at his sales call just in time, only to find his client was running an hour late. He tweaked his presentation, checking his competitors' Web sites, and [3](incorporated key points into his pitch). He made the presentation. He went to the hotel and the smiling clerk gave him a smoking room with twin beds instead of the non-smoking king he had reserved. He turned on a rerun of *Love, American Style*. He connected to the [4](contact management system), updated his customer file and sent a call report to the global sales team. He connected to the company benefits intranet and [5](calculated the balance in his 401k plan). It was up 4.5%. He falls asleep and sleeps soundly until his next wake-up call. At 5:30 a.m.

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THE YEAR OF THE DEAL

Merger power drives the global leaders of the top 1000

The market is applauding the turnaround at France's Alcatel, but its hard-driving chief executive, Serge Tchuruk, isn't about to sit back yet. Investors are so pleased with Tchuruk's efforts to restructure the once troubled telecom equipment maker that they have nearly doubled its market value—to $34.9 billion—in the past year. Tchuruk's goal, though, is to make Alcatel a world leader in new technology and equipment for Internet communications. So, in early June, he took a big step, using his fat share price to buy Texas-based DSC Communications Corp. in a $4.4 billion stock deal.

Expect to see many more moves such as Tchuruk's in the coming age of the global deal. Alcatel's absorption of the U.S. company places it among a growing list of deals in the global consolidation sweepstakes. Others include Daimler Benz and Chrysler, Citicorp and Travelers, Northern Telecom and Bay Networks. This year's Global 1000 has more significance than ever. In the past, market value was considered a measure of corporate success or just plain bigness. But this year, the Global 1000 also is a measure of the merger power among the world's corporate elite. It wasn't too long ago that pundits were asking: "Is your company too big?" Now it is: "Is your company big enough?"

This year's list shows clearly that the Americans and Europeans are the ones with the clout. The Global 1000, using data compiled by Geneva-based Morgan Stanley Capital International, ranks some 2,700 companies in 22 countries by market capitalization as of May 29. U.S. companies, as a group, have seen their stock prices rise some 37%. The U.S. now accounts for nearly half of the world's leading companies—a stunning 480—up 33 from last year. General Electric Co. is No. 1, with a market value of $271.6 billion. Meanwhile, European companies m up more than a third of the list—companies, up by 54. The stock price German companies have climbed 4 while French shares are up 60%.

CONTINENTAL SHIFTS. If the trend European and U.S. dominance contir to play out, it's the Asians—particul the Japanese—who stand to lose. flecting the seemingly never-ending vail in the region, Japanese compa saw their share prices shrink by 23 U.S. dollar terms, and some 8% in terms. Some 66 Japa companies have dro off the Global 1000 gether. Combined, the survivors now account just 8.5% of total ma value of all 1,000 talli

Since the Global ranks market valu dollar terms, curre plays a role in who's and who's down. But year's shifts are dr largely by surging kets in Europe and U.S., by investors' proval of industrial structuring on the C nent, and by me mania everywhere.

All three forces ered the historic me of Daimler and Chr Corp. With its ma value up 31% since year, to $52.1 bil Daimler had the wh withal to approach U.S. auto maker Ch ler as a serious buye paying stock, Daimle Jürgen Schrempp able to finance the billion deal without ing on debt. The re a global giant offe

How the Giants Stack Up

SALES (BILLIONS OF U.S. DOLLARS)

1	GENERAL MOTORS	$178.17
2	FORD MOTOR	153.63
3	ROYAL DUTCH/SHELL GROUP	128.16
4	MITSUI	126.44
5	EXXON	120.28
6	WAL-MART STORES	117.96
7	MITSUBISHI CORP.	114.24
8	GENERAL ELECTRIC	90.84
9	SUMITOMO CORP.	90.72
10	TOYOTA MOTOR	84.29

PROFITS (BILLIONS OF U.S. DOLLARS)

1	EXXON	$8.46
2	GENERAL ELECTRIC	8.20
3	ROYAL DUTCH/SHELL GROUP	7.75
4	INTEL	6.95
5	FORD MOTOR	6.92
6	GENERAL MOTORS	6.70
7	PHILIP MORRIS	6.31
8	IBM	6.09
9	HSBC HOLDINGS	5.47
10	UNILEVER	5.43

SHARE-PRICE GAIN (PERCENTAGE CHANGE FROM 1997 IN U.S. DOLLARS)

1	ALITALIA	566%
2	BANCA INTESA	416
3	YAHOO	409
4	OLIVETTI	286
5	CREDITO ITALIANO	276
6	UNISYS	257
7	CABLEVISION SYSTEMS	239
8	CAPITAL ONE FINANCIAL	211
9	AMERICA ONLINE	202
10	BANCA COMMERCIALE ITALIANA	198

RETURN ON EQUITY (PERCENTAGE)

1	NORTHWEST AIRLINES	633.7%
2	WPP GROUP	521.9
3	AMERICA ONLINE	454.7
4	REUTERS GROUP	274.5
5	BRITANNIC ASSURANCE	216.4
6	US AIRWAYS GROUP	141.9
7	DELL COMPUTER	139.9
8	PEARSON	132.0
9	AVON PRODUCTS	122.6
10	UST	103.0

DATA: MORGAN STANLEY CAPITAL INTERNATIONAL, BUSINESS WEEK

erything from luxury autos to sport-ility vehicles geared for drivers of the st century.

In industries ranging from autos to lecoms, analysts predict the merger aze will continue. Finance is sizzling. owering above all finance megamerg-s, of course, is the Travelers-Citicorp eal, for $72.6 billion in stock. Banking nsolidation is gathering pace in Eu-pe as financial institutions prepare for onetary union in January. And smaller t important deals are happening in pan, where barriers to foreign in-stors are tumbling under its Big Bang eralization. Merrill Lynch & Co., for ample, is reopening, under its own me, 33 branch offices of Yamaichi Se-rities Co., which collapsed last year.

ITITRUST ANGST. In telecommunica-ons, meanwhile, the M&A action is lder. From L. M. Ericsson in Sweden Northern Telecom in Canada, tele-m companies are in a race for part-rs that will help them create digital stems capable of carrying voice and ta via mobile phones, satellites, or ca-e. The decision of AT&T and cable ovider Tele-Communications Inc. to am up—in a pact worth $48 billion—is ely to spur further consolidation.

Of course, as the global deal engine ars along, there's no saying that all oss-border mergers—or even those single markets—will work out. Last nter's failed $100 billion tieup of axo Wellcome PLC and SmithKline echam PLC is a case in point. Anti-ust worries also are delaying some nding agreements. European Union icials held up WorldCom Inc.'s $37 lion purchase of MCI Communications rp. until MCI agreed to sell its major ternet businesses.

Still, it seems likely that corporations uned to the forces of global competi-n will continue to look for new part-rs or acquisitions. European compa-es hoping to pay in the U.S. with ck will have to take a lesson from mpanies like Daimler, whose accounts et American standards and whose ck is traded in the U.S.

More companies are doing just that. ecutives from German chemicals mak-BASF—No. 137 on the BUSINESS WEEK —were recently in New York to test e waters for a New York Stock Ex-ange listing. "It's a certificate of qual-," says BASF CEO Jürgen Strube. But also would allow the company to pur-e American takeover targets—and y in stock. "In terms of opening up ategic options, it would be a must," says. If more CEOs start thinking e Strube, the age of the global deal y be just beginning.

By Joseph Weber in Toronto, with reau reports

The Top 100 Companies

Another strong showing by U.S. companies, now comprising 8 of the top 10. Pfizer and Wal-Mart Stores both made strong moves up the list

RANK 1998	RANK 1997		MARKET VALUE Billions of U.S. dollars	
1	1	GENERAL ELECTRIC	U.S.	271.64
2	5	MICROSOFT	U.S.	208.98
3	3	ROYAL DUTCH/SHELL	Neth./Britain	195.68
4	2	COCA-COLA	U.S.	193.53
5	6	EXXON	U.S.	172.50
6	9	MERCK	U.S.	139.85
7	22	PFIZER	U.S.	133.03
8	4	NTT	Japan	130.91
9	20	WAL-MART STORES	U.S.	123.47
10	7	INTEL	U.S.	121.16
11	11	NOVARTIS	Switzerland	116.17
12	12	PROCTER & GAMBLE	U.S.	112.47
13	13	IBM	U.S.	110.79
14	18	BRISTOL-MYERS SQUIBB	U.S.	106.99
15	14	ROCHE HOLDING	Switzerland	98.90
16	26	AT&T	U.S.	98.87
17	19	GLAXO WELLCOME	Britain	96.07
18	8	TOYOTA MOTOR	Japan	94.34
19	56	LUCENT TECHNOLOGIES	U.S.	93.07
20	17	JOHNSON & JOHNSON	U.S.	92.87
21	10	PHILIP MORRIS	U.S.	90.74
22	32	BERKSHIRE HATHAWAY	U.S.	87.74
23	24	DUPONT	U.S.	87.11
24	33	UNILEVER	Neth/Britain	86.67
25	23	AIG	U.S.	86.62
26	21	BRITISH PETROLEUM	Britain	85.28
27	38	NESTLE	Switzerland	84.40
28	30	LLOYDS TSB GROUP	Britain	78.28
29	41	ALLIANZ	Germany	77.41
30	47	CISCO SYSTEMS	U.S.	77.36
31	28	WALT DISNEY	U.S.	77.21
32	25	DEUTSCHE TELEKOM	Germany	73.64
33	51	NATIONSBANK	U.S.	72.65
34	31	SBC COMMUNICATIONS	U.S.	71.49
35	78	BELL ATLANTIC	U.S.	71.12
36	68	TRAVELERS GROUP	U.S.	70.44
37	36	ELI LILLY	U.S.	67.97
38	34	CITICORP	U.S.	67.39
39	16	HSBC HOLDINGS	Britain	67.26
40	45	BRITISH TELECOMMS.	Britain	66.26
41	37	GILLETTE	U.S.	65.79
42	35	HEWLETT-PACKARD	U.S.	64.31
43	70	ING GROEP	Netherlands	64.08
44	46	BELLSOUTH	U.S.	63.86
45	39	AMERICAN HOME PRODUCTS	U.S.	63.42
46	48	FORD MOTOR	U.S.	62.92
47	43	FANNIE MAE	U.S.	61.84
48	72	SCHERING-PLOUGH	U.S.	61.35
49	29	MOBIL	U.S.	60.95
50	42	SMITHKLINE BEECHAM	Britain	60.89
51	27	PEPSICO	U.S.	60.85
52	115	CREDIT SUISSE GROUP	Switzerland	58.59
53	55	CHASE MANHATTAN	U.S.	58.01
54	79	HOME DEPOT	U.S.	57.62
55	40	ABBOTT LABORATORIES	U.S.	57.26
56	54	BANKAMERICA	U.S.	56.45
57	57	ENI	Italy	56.42
58	52	GTE	U.S.	56.13
59	NR	FRANCE TELECOM	France	56.01
60	71	L.M. ERICSSON	Sweden	55.62
61	180	SAP	Germany	55.59
62	118	FIRST UNION	U.S.	53.33
63	177	DELL COMPUTER	U.S.	52.77
64	98	WARNER-LAMBERT	U.S.	52.29
65	44	CHEVRON	U.S.	52.24
66	58	DAIMLER BENZ	Germany	52.11
67	147	TELECOM ITALIA	Italy	51.30
68	15	BANK OF TOKYO-MITSUBISHI	Japan	48.08
69	53	GENERAL MOTORS	U.S.	48.04
70	73	AMERICAN EXPRESS	U.S.	47.33
71	102	WORLDCOM	U.S.	46.96
72	255	MORGAN STANLEY DEAN WITTER	U.S.	46.90
73	66	AMERITECH	U.S.	46.56
74	169	AEGON	Netherlands	46.50
75	63	BOEING	U.S.	46.50
76	105	TIME WARNER	U.S.	45.97
77	95	DEUTSCHE BANK	Germany	45.92
78	101	TELEFONICA	Spain	45.85
79	69	McDONALD'S	U.S.	45.11
80	135	TIM	Italy	44.94
81	92	UBS	Switzerland	43.19
82	83	COMPAQ COMPUTER	U.S.	41.58
83	85	BARCLAYS BANK	Britain	40.70
84	NR	DIAGEO	Britain	40.17
85	49	AMOCO	U.S.	40.12
86	75	ALLSTATE	U.S.	39.52
87	166	NOKIA	Finland	39.48
88	84	SCHLUMBERGER	U.S.	38.90
89	104	MCI COMMUNICATIONS	U.S.	38.73
90	88	ZENECA GROUP	Britain	38.52
91	99	ELF AQUITAINE	France	38.12
92	230	MANNESMANN	Germany	38.04
93	NR	HALIFAX	Britain	37.96
94	171	AXA-UAP	France	37.78
95	61	MINNESOTA MINING & MFG.	U.S.	37.47
96	153	MUENCHENER RUCK	Germany	37.31
97	77	SIEMENS	Germany	37.06
98	188	BANC ONE	U.S.	36.15
99	142	CHRYSLER	U.S.	35.91
100	91	BAYER	Germany	34.94

Country by Country

GLOSSARY

MARKET VALUE: Share price on May 29, 1998, multiplied by latest available number of shares outstanding, translated into U.S. dollars at May month-end exchange rates. Market value may include several classes of stock; price and yield data are based on the company's most widely held issue.

SHARE PRICE AND ANNUAL CHANGE: Closing per-share price on May 29, 1998, in U.S. dollars. Annual percent change from May 30, 1997, to May 29, 1998, both in U.S. dollars and in each company's local currency.

PRICE/BOOK VALUE RATIO: The ratio of May closing price to latest available net worth per share or common shareholders' equity investment.

PRICE/EARNINGS RATIO: The ratio of May 29 closing price to latest 12-months' earnings per share.

YIELD: Latest 12-months' dividends per share as a percent of May closing price.

SALES: Net sales reported by company, translated at May 29 exchange rates; revenues for banks and other financial institutions are not included because they are not comparable to those of industrial companies.

PROFITS: Latest aftertax earnings available to common shareholders, translated at M 29 currency exchange rates; profits are from companies' continuing operations before extraordinary or special item Sales, profits, and assets ar 1997 fiscal year unless note

RETURN ON EQUITY: Latest months' earnings per share percent of most recent book value per share.

INDUSTRY CODE: For key to two-digit code, see page 84

Data for individual companies: Morgan Stanley Capital International, unless otherwise indicated. For further information on MSCI data, contact Morgan Stanley Dean Witter & Co. a 212-761-8141 (New York) or 071-425-6660 (London). Country composites and rankings calculated by BUSINESS WEEK. Additional data by Standard & Poor's Compustat, a divis of The McGraw-Hill Companies if footnoted.

COUNTRY RANK	GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S. $	% CHANGE FROM 1997 (U.S. $)	% CHANGE FROM 1997 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S. $ MIL.	ASSETS U.S. $ MIL.	RETURN ON EQUITY %	IND C
GLOBAL COMPOSITE		**16624529**	**209**	**36**	**45**	**4.2**	**29**	**2.0**	**9242313**	**625959**	**35335717**	**18.6**	
AUSTRALIA													
COUNTRY COMPOSITE		**148592**	**10**	**–1**	**20**	**3.0**	**22**	**3.1**	**57388**	**8687**	**430149**	**15.2**	
1 TELSTRA	128	30278	2	NA	NA	6.7	19	1.6	9668	1608	16196	34.8	
2 NEWS CORP.	184	21802	6	39	69	1.7	24	0.3	9013	811	25905	7.0	
3 NATIONAL AUSTRALIA BANK	207	19828	14	–3	18	2.6	15	4.4	NA	1391	108803b	17.0d	
4 BROKEN HILL PROPRIETARY	236	17500	9	–40	–27	2.2	22	3.7	13120	868	23009	10.0	
5 WESTPAC BANKING	344	12243	7	22	48	2.3	15	3.9	NA	784	74512	15.0	
6 COMMONWEALTH BANK OF AUSTRALIA	397	10865	12	10	33	2.6	15	5.5	NA	755	75227	17.2	
7 AUSTRALIA & NEW ZEALAND BANKING GROUP	398	10825	7	4	26	2.5	15	4.4	NA	733	77793	16.4	
8 COCA-COLA AMATIL	670	6237	7	–36	–23	1.9	41	1.6	3024	152	5929	4.5	
9 LEND LEASE	772	5333	21	8	31	2.9	26	2.9	1066	202	2927	11.0	
10 COLES MYER	796	5171	5	–3	18	3.3	24	3.2	12041	199	4194	13.9	
11 BRAMBLES INDUSTRIES	891	4548	20	13	37	5.0	28	2.2	1671	152	1965	18.1	
12 RIO TINTO LTD. (6)	NR	3962	12	–26	–11	2.8	16	4.0	7784	1031	13688b	17.4d	
AUSTRIA													
COUNTRY COMPOSITE		**9588**	**90**	**41**	**47**	**2.4**	**57**	**1.2**	**NA**	**112**	**60449**	**4.2**	
1 BANK AUSTRIA	457	9588	90	41	47	2.4	57	1.2	NA	112b	60449b	4.2	
BELGIUM													
COUNTRY COMPOSITE		**130004**	**572**	**53**	**59**	**3.1**	**23**	**2.4**	**48621**	**6224**	**601698**	**13.8**	
1 ELECTRABEL	305	13679	250	12	17	2.3	17	5.3	6491	814	12766b	13.8d	
2 SOCIETE GENERALE DE BELGIQUE	327	12585	178	93	102	2.6	24	1.8	NA	525	24878	10.8	
3 GENERALE DE BANQUE	348	12112	733	85	93	3.3	26	2.0	NA	464	160901	12.4	
4 FORTIS AG (4)	NR	11987	286	47	53	3.1	23	1.5	NA	489	4176	13.1	
5 TRACTEBEL	383	11195	133	51	57	3.1	25	2.2	9371b	307b	19740b	12.6	
6 KREDIETBANK	414	10571	702	70	78	3.6	27	1.5	NA	399	113437	13.4	
7 PETROFINA	455	9625	411	17	22	2.3	16	3.1	19786	600	10984	14.1	
8 ALMANIJ	598	7187	82	86	94	3.7	31	1.2	NA	234	3106b	12.0d	
9 GROUPE UCB	611	6951	4764	75	83	9.8	41	0.7	1648	171	1420b	24.0d	
10 ROYALE BELGE	674	6194	387	38	44	3.0	21	2.4	2863	297	26011	14.5	
11 SOLVAY	678	6168	73	21	27	2.1	16	3.0	8463	373	7705b	12.6d	
12 COMPAGNIE BENELUX PARIBAS (COBEPA)	716	5784	73	71	79	2.3	7	3.2	NA	637	1912b	25.6d	
13 CREDIT COMMUNAL HOLDING/DEXIA BELGIUM (7)	NR	5495	150	50	56	2.3	19	2.4	NA	596	204878	12.0	
14 GROUPE BRUXELLES LAMBERT	769	5343	220	38	44	2.1	30	2.6	NA	176b	5167b	7.2	
15 ELECTRAFINA	804	5128	138	36	42	1.6	18	2.9	NA	142b	4618b	8.6	

*Based on nonconsolidated results. a) Results are for 9 months. b) Based on 1996 data. c) Based on 1998 data. d) Difference between earnings and book value between 12 and 18 months. †Dig Equipment was acquired by Compaq on June 12, 1998. 1) Global ranking calculated for Royal Dutch/Shell Group by combining market value of the Netherlands' Royal Dutch Petroleum and Brita Shell Transport & Trading. 2) Global ranking calculated for Unilever by combining market value of the Netherlands' Unilever NV and Britain's Unilever PLC. 3) Global ranking calculated for ABB A Brown Boveri by combining market value of Sweden's ABB AB and Switzerland's ABB AG. 4) Global ranking calculated for Fortis by combining market value of Belgium's Fortis AG Group and the Netherlands' Fortis AMEV. 5) Global ranking calculated for Reed Elsevier by combining market value of Britain's Reed International and the Netherlands' Elsevier. 6) Global ranking calculated for Tinto by combining market value of Britain's Rio Tinto PLC and Australia's Rio Tinto Ltd. 7) Global ranking calculated for Dexia by combining market value of Belgium's Credit Communal Holding Belgium and France's Dexia France. 8) Data for this company provided by Standard & Poor's Compustat, a division of The McGraw-Hill Companies.
NA = Not available. NEG = Negative return. NM = Not meaningful.

BRITAIN

COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL.	PRICE PER SHARE U.S. $	% CHANGE FROM 1997 (U.S. $)	% CHANGE FROM 1997 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL.	PROFITS U.S. $ MIL.	ASSETS U.S. $ MIL.	RETURN ON EQUITY %	INDUSTRY CODE
COUNTRY COMPOSITE			**1782486**	**13**	**39**	**40**	**1.2**	**24**	**2.4**	**935310**	**95744**	**3793230**	**33.1**	
1	GLAXO WELLCOME	17	96070	27	34	35	32.0	32	2.1	13013	3017	13758	100.9	45
2	BRITISH PETROLEUM	26	85283	15	24	24	3.7	19	2.5	70870	4600	53613	18.9	11
3	LLOYDS TSB GROUP	28	78275	15	44	45	7.7	20	1.9	NA	3808	225134	37.8	61
4	SHELL TRANSPORT & TRADING (1)	NR	73372	7	12	13	3.1	27	2.9	128155	7753	112758	11.4	11
5	HSBC HOLDINGS	39	67257	26	–16	–16	2.7	13	3.1	NA	5471	467018	20.8	61
6	BRITISH TELECOMMUNICATIONS	40	66261	10	57	57	3.7	20	3.0	25504c	3307c	40869	18.1d	55
7	SMITHKLINE BEECHAM	50	60888	11	28	28	20.8	34	1.6	12711	1760	13832	61.9	45
8	BARCLAYS BANK	83	40700	27	37	38	3.5	22	2.3	NA	1843	382657	15.8d	61
9	DIAGEO	84	40169	11	21	21	2.8	18	2.6	21175	2156	12741b	15.5d	43
10	ZENECA GROUP	90	38521	41	34	34	10.9	32	1.6	8470	1190	8170	33.8	45
11	HALIFAX	93	37963	15	NA	NA	3.2	21	1.9	NA	1808	187790	15.4	62
12	UNILEVER PLC (2)	NR	35757	11	64	64	6.9	15	1.3	48539	5430	31386	47.2	44
13	VODAFONE GROUP	108	33754	11	148	148	26.8	54	0.8	2852	593	3949	49.6	55
14	NATIONAL WESTMINSTER BANK	119	31593	18	50	50	2.7	24	2.9	NA	1313	302338	11.2	61
15	B. A.T. INDUSTRIES	140	27951	9	0	1	3.6	17	4.7	24175	1623	83440	20.7	71
16	PRUDENTIAL	153	25738	13	32	33	5.7	19	2.4	17188	1365	176479	30.2	63
17	CABLE & WIRELESS	154	25601	11	38	39	4.2	21	1.8	11417c	1194c	15764	19.4d	55
18	MARKS & SPENCER	157	25343	9	7	7	3.4	20	2.4	12788	1235	11171	17.2	54
19	ABBEY NATIONAL	159	25178	18	24	24	2.6	17	2.8	NA	1512	245923	15.7	62
20	GENERAL ELECTRIC CO.	179	22179	8	44	44	5.2	21	2.7	18177	1068	10043	25.0	34
21	BG	201	20246	5	53	54	1.4	23	2.7	7012	820	29636	6.1	12
22	RENTOKIL INITIAL	206	19919	7	81	81	–343.2	41	0.7	4586	480	2689	NA	52
23	TESCO	216	19303	9	43	43	3.1	20	2.2	26828c	824c	12129c	15.6	54
24	GRANADA GROUP	244	16893	19	32	33	9.1	22	1.2	6671	747	9704	42.1	53
25	REUTERS GROUP	246	16765	11	3	4	57.4	21	2.1	4700	770	4625	274.5	52
26	ROYAL AND SUN ALLIANCE INSURANCE GROUP	248	16707	11	41	41	1.7	22	3.2	15043	793	90786b	7.4d	63
27	BRITISH AEROSPACE	260	15918	9	74	75	6.5	22	0.9	11850	695	13471	29.2	31
28	CADBURY SCHWEPPES	268	15424	15	71	71	5.7	25	1.9	6882	610	7774	22.5	43
29	J. SAINSBURY	275	14981	8	38	38	2.4	18	2.9	25269c	811c	11881	13.3d	54
30	ROYAL BANK OF SCOTLAND GROUP	286	14567	17	72	72	3.8	18	2.2	NA	719	118390	21.5	61
31	BASS	288	14551	18	41	41	2.6	20	2.5	8576	801	10857	13.5	53
32	GREAT UNIVERSAL STORES	292	14277	14	34	35	3.1	22	2.1	4736	623	7534	14.0	54
33	NORWICH UNION	294	14205	7	NA	NA	1.8	18	2.6	7439b	605b	81142	10.0	63
34	BANK OF SCOTLAND	295	14179	12	84	84	4.1	18	1.4	NA	768c	89195c	22.4	61
35	LEGAL & GENERAL GROUP	299	14055	11	53	54	3.5	34	1.9	4884	406	96317	10.3	63
36	IMPERIAL CHEMICAL INDUSTRIES	304	13726	19	42	43	2.4	31	2.8	18039	391	14759b	7.7d	22
37	BOOTS	306	13636	15	38	38	5.1	22	2.3	7465	590	5847	23.2	54
38	RIO TINTO PLC (6)	NR	13372	12	–27	–27	2.4	14	4.2	9171	1213	16543b	16.9d	24
39	BAA	324	12689	12	37	37	2.2	21	1.9	2738c	605c	8962	10.6d	52
40	SIEBE	326	12593	25	59	60	7.2	27	1.0	4901	414	5137	26.9	35
41	COMMERCIAL UNION ASSURANCE	330	12518	18	62	62	1.7	33	2.9	13925	445	96441	5.1	63
42	STANDARD CHARTERED	342	12321	12	–22	–21	3.2	12	2.4	NA	995	76938	26.0	61
43	BRITISH SKY BROADCASTING GROUP	351	12089	7	–25	–25	–17.6	27	1.4	2071	470	1237	NA	51
44	KINGFISHER	358	11900	18	52	52	5.1	20	2.1	10452c	606c	5579	25.9d	54
45	CABLE & WIRELESS COMMUNICATIONS	371	11450	8	NA	NA	4.4	47	NA	3723c	246c	8465c	9.4	55
46	NATIONAL POWER	379	11275	9	3	3	3.6	12	4.7	5469c	949c	10169	30.0d	12
47	GENERAL ACCIDENT	389	11072	23	54	55	1.9	13	2.7	6929	1120	52005	15.4	63
48	BRITISH AIRWAYS	393	10967	11	–9	–9	2.2	15	2.6	14093c	750c	17018	15.0d	56
49	BTR	395	10915	3	0	0	3.1	8	5.9	13194	1438	12524	41.0	71
50	SCOTTISH POWER	405	10752	9	44	44	4.3	13	3.7	5101c	794c	7906	31.9d	12
51	GKN	407	10654	15	72	72	11.7	23	1.6	5517	450	4012	50.1	38
52	PEARSON	415	10564	18	56	57	42.5	32	1.7	3739	326	3674	132.0	51
53	REED INTERNATIONAL (5)	NR	10554	9	–6	–6	8.7	20	2.8	5572	991	8158	43.2	51
54	ALLIED DOMECQ	425	10352	10	37	37	3.0	15	4.1	7255	662	8444	19.9	43
55	RAILTRACK GROUP	448	9790	19	85	86	2.2	19	1.9	3974	476	8803	11.8	52
56	ORANGE	482	9001	8	122	123	–45.5	–38	0.0	1490	–227	1469b	NA	55
57	WOOLWICH	483	8975	6	NA	NA	NA	22	2.8	NA	390	NA	NA	62
58	NATIONAL GRID GROUP	484	8971	6	64	65	4.1	15	3.6	2377	677	5458	27.4	12
59	ASDA GROUP	486	8946	3	51	52	2.7	18	1.7	11337	429	6117	14.5	54
60	SCOTTISH & NEWCASTLE BREWERIES	500	8661	14	22	23	2.5	17	2.6	5462	465	6305	14.5	53
61	SCHRODERS	504	8624	29	57	57	5.1	31	0.9	NA	279	17376	16.4	62
62	PENINSULAR & ORIENTAL STEAM NAVIGATION	505	8587	14	32	32	2.1	19	3.6	9650	442	10495	10.9	58
63	LAND SECURITIES	509	8490	16	4	5	1.2	26	2.9	NA	323c	10336	4.7d	64
64	ASSOCIATED BRITISH FOODS	522	8231	9	–1	–0	1.7	7	1.8	8485	1111	6502	23.3	44
65	RECKITT & COLMAN	526	8205	20	43	44	5.6	22	1.9	3582	371	4226	25.2	44
66	POWERGEN	535	8078	13	11	11	2.6	11	3.8	4781c	714c	6079	22.6d	12
67	WHITBREAD	544	7951	16	24	25	2.0	18	2.6	5215c	444c	6718c	11.1	53
68	ALLIANCE & LEICESTER	546	7868	14	35	35	2.9	17	2.5	NA	471	39795	17.2	62

THE BUSINESS WEEK GLOBAL 1000

COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S. $	% CHANGE FROM 1997 (U.S. $)	% CHANGE FROM 1997 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S. $ MIL	ASSETS U.S. $ MIL	RETURN ON EQUITY %	INDUS COD
69	BOC GROUP	556	7705	16	-6	-5	2.5	18	3.2	5997	469	7988	14.1	2
70	HAYS	558	7689	18	100	100	24.6	38	0.9	1842	178	1106	64.9	5
71	SUN LIFE & PROVINCIAL HOLDINGS	580	7429	9	88	88	2.9	24	2.1	5252	260	65074	12.4	6
72	UNITED UTILITIES	581	7412	14	18	19	2.1	10	4.9	3506c	714c	9227	20.3d	5
73	CENTRICA	599	7126	2	53	54	1.7	99	0.0	12788	72	6688	1.7	1
74	UNITED NEWS & MEDIA	604	7056	14	13	14	-15.6	20	2.7	3695	353	2605b	NA	5
75	ROLLS-ROYCE	605	7047	5	17	17	3.0	19	2.0	7067	365	7175	15.6	3
76	COMPASS GROUP	614	6896	21	86	87	-4.7	38	0.8	6038	164	1709	NA	5
77	TOMKINS	621	6809	6	32	33	6.0	15	3.4	7483	461	5119	39.3	7
78	MISYS	626	6724	60	178	179	-15.9	61	0.4	531	75	232	NA	5
79	LADBROKE GROUP	627	6669	6	50	50	2.4	23	2.1	6223	284	5552	10.4	5
80	EMI GROUP	634	6637	8	-11	-11	NM	21	3.1	5397c	326c	3672	NM	4
81	SAFEWAY PLC	635	6632	6	3	4	2.2	17	3.8	11380c	393c	6138	12.7d	5
82	BRITISH ENERGY	636	6632	9	177	178	2.6	31	2.6	3186c	205c	10875	8.5d	1
83	AMVESCAP	659	6386	11	96	97	-181.8	27	1.1	NA	191	686	NA	6
84	LUCASVARITY	669	6251	4	39	40	7.1	17	1.7	7633c	370c	4886	42.0d	3
85	THAMES WATER	680	6154	16	44	45	1.7	11	3.6	2099	540	6452	15.6	5
86	3I GROUP	684	6130	10	27	27	1.3	37	1.5	NA	149	7169	3.5	6
87	STAGECOACH HOLDINGS	730	5639	22	102	103	18.9	31	0.7	1880	123	2895	60.3	5
88	BRITISH LAND	732	5637	11	12	12	1.4	36	1.4	NA	109	7826	3.7	6
89	WILLIAMS	735	5621	7	41	41	-24.7	20	3.6	3635	262	2668	NA	5
90	GUARDIAN ROYAL EXCHANGE	743	5563	6	33	33	1.6	6	3.1	5781	975	30598b	28.8d	6
91	SEVERN TRENT	754	5451	16	26	26	1.3	10	3.9	1982	556	6703	12.7	5
92	BILLITON	786	5228	3	NA	NA	1.1	12	4.2	5286	335	7870	9.6	2
93	BRITISH STEEL	817	5034	2	-1	-1	0.7	13	6.6	11780	506	12843	4.9	2
94	RMC GROUP	839	4904	19	27	27	2.1	17	2.4	6535	296	5650	12.6	2
95	CARLTON COMMUNICATIONS	845	4860	8	-6	-6	5.6	15	2.6	2853	337	2663	38.1	5
96	BLUE CIRCLE INDUSTRIES	847	4857	6	-7	-7	2.6	14	3.7	3162	351	4228	18.9	2
97	SMITHS INDUSTRIES	848	4842	16	25	25	12.4	22	1.9	1755	212	1255	56.8	3
98	DAILY MAIL & GENERAL TRUST	861	4709	47	83	84	11.8	32	0.8	1957	146	1957	36.7	5
99	WPP GROUP	862	4707	6	63	63	130.3	25	0.5	11883	189	3090b	521.9d	5
100	TI GROUP	879	4614	10	3	3	7.2	18	2.7	3050	242	2275	39.0	1
101	ENTERPRISE OIL	881	4606	9	-16	-16	3.4	24	3.1	1544	187	4425	13.9	1
102	LASMO	888	4568	5	18	19	2.5	78	0.8	1177	59	4661	3.2	1
103	SECURICOR	898	4515	8	60	61	12.3	171	0.4	2207	27	1221	7.2	5
104	SEMA GROUP	901	4494	39	88	89	29.3	61	0.3	1843	72	890b	47.8d	5
105	EMAP	914	4404	21	64	64	10.9	30	1.1	1253	131	1149	36.3	5
106	NORTHERN ROCK	915	4402	10	NA	NA	4.1	21	1.7	NA	212	25795	19.9	6
107	RANK GROUP	916	4395	6	-17	-17	2.1	13	5.0	3281	352	5350	15.9	5
108	BURMAH CASTROL	944	4231	20	15	15	3.5	16	3.3	4788	260	3287	21.6	1
109	PROVIDENT FINANCIAL	956	4179	16	64	64	9.4	27	2.1	NA	152	1388b	35.1d	6
110	SOUTHERN ELECTRIC	962	4128	9	30	30	3.3	14	4.2	2882	314	2353	22.8	5
111	DIXONS GROUP	976	4065	10	26	26	4.9	17	1.9	3983	213	2402	29.2	5
112	BRITANNIC ASSURANCE	988	3968	20	48	49	18.3	8	2.7	663	467	11133b	216.4d	6
113	IMPERIAL TOBACCO GROUP	990	3962	8	NA	NA	-2.3	11	4.7	6324	346	1569	NA	1
114	ELECTROCOMPONENTS	993	3956	9	42	42	8.6	31	1.4	988	123	727	28.1	5
115	WOLSELEY	997	3944	7	-9	-9	2.9	14	2.7	7504	288	3547	21.0	5

CANADA

COUNTRY COMPOSITE			**294776**	**46**	**27**	**34**	**3.0**	**15**	**1.7**	**157178**	**13694**	**973639**	**13.6**	
1	NORTHERN TELECOM	106	33796	64	53	61	7.0	40	0.5	15449	829	12554	17.6	5
2	BCE (BELL CANADA ENTERPRISES)	130	29418	46	76	85	5.3	33	2.0	22812	972	27697	15.8	6
3	ROYAL BANK OF CANADA	219	18885	61	41	49	3.2	16	1.9	NA	1154	168235	19.4	6
4	THOMSON	241	17158	28	27	34	3.5	31	2.2	8766	536	13333	11.1	5
5	SEAGRAM	274	15172	44	9	15	1.7	40	1.5	12560	502	20936	4.2	1
6	BANK OF MONTREAL	284	14746	56	47	55	2.8	17	2.2	NA	897	142849	16.5	6
7	CANADIAN IMPERIAL BANK OF COMMERCE	298	14064	34	41	48	2.4	15	2.4	NA	1066	156441	16.2	6
8	TORONTO-DOMINION BANK	312	13348	45	49	57	2.9	18	2.1	NA	748	112617	16.0	6
9	BANK OF NOVA SCOTIA	315	13153	27	29	36	2.8	13	2.1	NA	1041	134130	21.3	6
10	CANADIAN PACIFIC	446	9791	29	9	15	1.9	15	1.1	6571	651	11912	12.4	5
11	BOMBARDIER	494	8740	26	22	29	5.8	32	0.9	5842c	289c	5464	18.3d	3
12	IMASCO	512	8431	19	32	39	3.2	15	2.5	6879	543	34543	20.7	6
13	IMPERIAL OIL	524	8214	18	14	20	2.8	16	2.8	7333	582	6914	17.2	1
14	BARRICK GOLD	593	7243	19	-24	-20	2.2	-69	0.9	1284	-123	4306	NEG	1
15	ALCAN ALUMINIUM	651	6502	29	-20	-16	1.3	15	2.1	7777	468	9466	8.9	5
16	NOVA CORP.	759	5399	12	44	52	1.9	29	2.3	3327	223	7389	6.8	1
17	LOBLAW	770	5340	22	58	67	6.0	35	0.6	7566	146	2427b	17.0d	5
18	TRANSCANADA PIPELINES	794	5175	23	20	27	2.3	18	3.7	9789	314	8671b	12.4d	1
19	CANADIAN NATIONAL RAILWAY	815	5042	59	42	50	2.2	16	1.2	2991	289	4863	13.4	6
20	MAGNA INTERNATIONAL	820	5010	70	31	38	2.2	18	1.3	5287	293	3662	12.5	3

RY	GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL.	PRICE PER SHARE U.S. $	% CHANGE FROM 1997 (U.S. $)	% CHANGE FROM 1997 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL.	PROFITS U.S. $ MIL.	ASSETS U.S. $ MIL.	RETURN ON EQUITY %	INDUSTRY CODE
SHELL CANADA	821	5005	17	25	32	2.3	15	2.9	3639	359	4100	14.9	11
NEWBRIDGE NETWORKS	826	4968	28	–29	–25	6.3	–133	0.0	946	108	1029	NEG	34
GEORGE WESTON	855	4780	36	77	87	4.0	23	0.8	9568	168	4040	17.2	54
FAIRFAX FINANCIAL HOLDINGS	866	4686	386	56	64	4.1	24	0.0	709b	104b	3972b	17.2d	63
POTASH CORP. OF SASKATCHEWAN	871	4673	86	6	11	2.1	15	1.2	2326	297	4428	13.7	22
PETRO-CANADA	874	4627	17	2	4	1.7	28	1.3	4190	210	5731	6.1	11
BC TELECOM	876	4618	37	66	75	3.0	23	2.6	1893	195	3294	12.7	55
POWER CORP. OF CANADA	931	4335	44	91	102	2.5	19	1.4	NA	228	38412	12.8	62
NORANDA	932	4335	18	–21	17	1.3	29	3.9	4405	179	10251b	4.5d	24
LAIDLAW	968	4098	12	8	–3	1.5	16	1.6	3031	200	6117	9.0	52
PANCANADIAN PETROLEUM	980	4022	16	–27	–23	2.2	24	1.7	2239	227	3856	9.1	11
NMARK													
NTRY COMPOSITE		**64295**	**2870**	**43**	**50**	**115.9**	**55**	**1.3**	**9960**	**2036**	**150095**	**15.1**	
TELE DANMARK	343	12267	94	90	99	3.0	54	2.8	4269	227	7591	5.6	55
NOVO-NORDISK	361	11820	158	47	54	4.4	33	0.5	2493	326	3770	13.4	45
DAMPSKIBSSELSKABET AF 1912	442	9859	9129	31	37	30.9	133	0.3	NA	74	533	23.1	58
DAMPSKIBSSELSKABET SVENBORG	450	9765	13104	31	37	25.4	127	0.3	NA	77	594	20.1	58
DEN DANSKE BANK	639	6585	124	31	37	1.6	11	2.1	NA	619	77559	15.3	61
RATIN	784	5243	200	NA	NA	856.9	49	0.9	344b	108b	26b	NM	52
CARLSBERG	906	4453	70	18	23	3.2	24	0.8	2853	183	3670	12.9	43
UNIDANMARK	938	4302	81	54	61	1.6	10	2.7	NA	424	56352	15.6	61
LAND													
ITRY COMPOSITE		**52754**	**34**	**70**	**80**	**5.3**	**17**	**2.5**	**19014**	**3132**	**127801**	**27.0**	
NOKIA	87	39481	66	101	112	11.1	33	1.1	9711	1105	7704	33.7	34
UPM-KYMMENE	537	8037	29	26	33	1.7	8	3.5	9303	856	12515	19.9	23
MERITA-NORDBANKEN	785	5236	6	84	94	3.1	11	2.9	NA	1171	107583	27.3	61
NCE													
ITRY COMPOSITE		**704389**	**169**	**60**	**66**	**3.7**	**30**	**1.9**	**578474**	**26045**	**2804023**	**11.8**	
FRANCE TELECOM	59	56011	56	NA	NA	3.6	23	2.9	26197	2484	46826	15.9	55
ELF AQUITAINE	91	38123	139	39	44	2.9	22	2.7	42507	1702	42290	12.7	11
AXA-UAP	94	37782	114	90	97	3.0	28	2.0	NA	1324	403493	10.5	63
ALCATEL	101	34916	214	97	105	4.8	45	1.4	31067	780	42083	10.6	34
LOREAL	110	33573	497	37	42	6.9	47	0.8	11553	703	10833	14.6	45
TOTAL	127	30345	124	36	41	2.9	24	2.6	31939	1272	25358	12.0	11
IVENDI	144	27188	201	63	69	3.8	30	1.9	27933	901	43161	12.6	52
CARREFOUR	167	23512	611	–7	–4	6.5	38	1.2	28293	626	14531	17.2	54
SUEZ LYONNAISE DES EAUX	186	21544	171	73	80	2.7	32	2.2	31828	671	79101	8.5	52
RHONE-POULENC	204	20122	55	71	78	3.0	33	1.7	15042	571	27554	8.9	45
GROUPE DANONE	209	19691	269	79	85	2.9	32	1.7	14789	612	16479	8.9	44
SOCIETE GENERALE	212	19548	198	78	85	1.9	19	2.7	NA	1021	411423	9.7	61
PINAULT-PRINTEMPS-REDOUTE	215	19332	823	96	104	6.6	39	1.2	14906	477	11312	17.1	54
VMH MOET HENNESSY LOUIS VUITTON	224	18378	210	–14	–10	2.9	23	2.7	8029	814	16270	12.8	46
BANQUE NATIONALE DE PARIS	227	18214	85	108	116	1.8	18	2.1	NA	997	340123	9.8	61
COMPAGNIE DE SAINT-GOBAIN	233	17603	197	43	48	2.2	19	2.2	17898	939	21054b	11.7d	21
PARIBAS	255	16327	102	58	64	2.0	15	3.4	NA	1099	230472	12.9	61
AIR LIQUIDE	291	14422	197	28	33	3.3	28	2.0	6415	516	9324	11.8	22
GROUPE SCHNEIDER	319	12926	85	76	82	3.2	35	1.9	7922	367	9449	9.2	34
RENAULT	328	12546	52	143	153	1.7	14	1.7	34752	907	38971	12.6	42
SANOFI	335	12463	117	35	40	3.4	39	1.5	4294	321	6665	8.8	45
SGF	377	11327	62	102	110	2.1	32	2.0	11963	322	69366b	6.7d	63
STMICROELECTRONICS	382	11214	81	–1	3	3.4	28	0.0	4019	407	5446	12.3	35
LAFARGE	423	10406	101	62	68	2.1	24	2.7	7031	407	15968	9.0	21
CAP GEMINI	430	10185	149	191	202	6.1	74	0.6	3373	127	3257	8.2	52
ACCOR	443	9836	274	98	105	3.3	39	2.1	5184	252	10663	8.5	53
PEUGEOT	445	9792	195	97	105	1.1	–21	0.4	31221	–463	31651	NEG	42
PROMODES GROUP	469	9324	487	44	49	5.8	34	0.9	18498	271	8362	17.0	54
MICHELIN	511	8471	62	13	17	2.2	13	1.5	13320	649	13659	16.5	37
SYNTHELABO	539	8015	166	42	47	8.0	44	0.9	1963	184	1918	18.4	45
LEGRAND	557	7705	276	71	78	6.6	43	0.8	2176	178	3273	15.1	34
VALEO	631	6652	94	58	65	3.4	27	1.7	5678	247	4821	12.6	37
CAVAS	657	6428	79	43	49	2.4	28	0.0	8644	228	6695	8.6	52
CODEXHO ALLIANCE	681	6148	184	61	67	5.0	63	1.2	4930	90	3345	8.0	52
CASINO, GUICHARD-PERRACHON	690	6099	71	58	64	3.6	31	2.8	12746	186	7133	11.5	54
CHRISTIAN DIOR	710	5834	138	–12	–9	1.5	20	3.0	8238	298	22028	7.6	46

THE BUSINESS WEEK GLOBAL 1000

COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S. $	% CHANGE FROM 1997 (U.S. $)	% CHANGE FROM 1997 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S. $ MIL	ASSETS U.S. $ MIL	RETURN ON EQUITY %	INC
37	CANAL PLUS	722	5693	182	7	11	3.0	22	2.8	2271	256	3618b	13.6d	
38	ERIDANIA BEGHIN-SAY	723	5689	219	56	62	1.8	18	4.0	10639	318	8871	10.0	
39	CREDIT COMMERCIAL DE FRANCE	745	5551	76	80	87	1.9	20	2.2	NA	268	66690	9.3	
40	LAGARDERE	780	5267	44	49	55	2.8	23	2.5	11016	231	11312	12.1	
41	DASSAULT SYSTEMES	781	5267	47	46	51	25.2	65	0.6	315	81	407	38.6	
42	CREDIT LYONNAIS	805	5127	98	162	172	0.8	29	0.0	NA	177	250503	2.7	
43	DEXIA FRANCE (7)	NR	4996	136	45	51	2.1	17	3.2	NA	597	204088	12.3	
44	THOMSON-CSF	849	4835	40	42	47	1.9	14	2.2	6440	355	10019	13.7	
45	BOUYGUES	863	4700	181	108	116	3.6	37	2.4	15223	126	13633	9.7	
46	SOCIETE CENTRALE DU GAN	918	4393	30	42	48	1.4	93	0.0	8527	47	152415	1.5	
47	BIC	942	4253	77	4	8	4.5	32	2.9	1255	134	1468	14.0	
48	ESSILOR INTERNATIONAL	947	4215	426	68	74	4.9	40	1.0	1563	103	1662	12.3	
49	PERNOD RICARD	955	4179	74	55	61	2.3	19	3.2	3184	219	4067	11.9	
50	PECHINEY	958	4151	51	49	55	1.6	14	2.0	11658	303	9985	11.4	
51	USINOR	974	4069	17	11	16	0.9	12	5.0	12035	343	10930	7.9	

GERMANY

COUNTRY COMPOSITE		906505	276	42	49	5.4	32	1.8	693383	25054	2916508	15.9	
1	ALLIANZ	29	77412	316	52	59	7.9	56	0.5	NA	1512	174738b	14.2d	
2	DEUTSCHE TELEKOM	32	73640	27	21	26	3.0	33	3.6	37891	1853	91327	9.0	
3	SAP	61	55593	517	189	202	34.9	104	0.4	3375	517	2844	33.5	
4	DAIMLER-BENZ	66	52105	101	31	37	3.5	29	1.3	69582	1779	63081b	12.0d	
5	DEUTSCHE BANK	77	45920	86	55	62	2.6	68	1.7	NA	536	585015	3.9	
6	MANNESMANN	92	38037	979	141	151	9.8	67	0.8	21930	274	16532	14.6	
7	MUENCHENER RUECK.	96	37311	455	78	86	12.1	52	0.3	16079	333	91066	23.3	
8	SIEMENS	97	37062	65	14	20	2.6	25	1.9	59979	1343	55027	10.3	
9	BAYER	100	34944	48	23	29	2.8	21	3.2	30853	1650	30385	13.4	
10	VEBA	116	32686	66	16	21	2.8	21	2.6	42667	1576	45207	13.1	
11	VOLKSWAGEN	122	30938	812	28	34	3.8	18	1.2	63521	749	57009	21.6	
12	HOECHST	132	29352	50	29	35	3.5	29	2.4	29224	753	34163	12.0	
13	DRESDNER BANK	136	28878	56	62	69	2.9	34	2.2	NA	931	374537	8.7	
14	BASF	137	28856	46	26	31	2.4	17	3.5	31288	1815	26917	14.0	
15	RWE	146	26724	53	24	30	7.0	30	2.4	34326	731	45240	23.5	
16	BAYERISCHE VEREINSBANK	155	25449	84	106	116	3.4	47	1.5	NA	474	251011	7.2	
17	BMW	160	25130	1059	55	62	4.6	33	1.5	33732	699	29886	14.1	
18	COMMERZBANK	220	18816	41	40	46	2.2	30	3.0	NA	742	289393	7.5	
19	BAYERISCHE HYPOTHEKEN- UND WECHSEL-BANK	247	16710	63	98	107	3.3	NA	1.8	NA	435	205045	NA	
20	METRO	270	15364	64	41	47	7.9	36	2.5	31882	305	11654b	22.3d	
21	VIAG	279	14894	561	23	29	3.4	27	2.0	23812b	448b	27199b	12.5	
22	ERGO VERSICHERUNGSGRUPPE	308	13508	179	NA	NA	NA	NA	0.7	NA	NA	NA	NA	
23	HENKEL	347	12121	78	50	56	4.2	26	1.4	11255	469	9769	16.0	
24	DEUTSCHE LUFTHANSA	459	9546	25	57	64	3.3	25	2.0	11702b	311b	10485b	13.3	
25	THYSSEN	485	8946	261	15	20	2.4	17	3.1	22859	1173	17257	14.3	
26	ADIDAS-SALOMON	540	8013	177	68	75	15.8	31	0.8	3757	261	1377b	51.4d	
27	SCHERING	541	7996	117	16	22	3.9	32	1.7	3503	250	4793	12.2	
28	MERCK KGAA	628	6667	39	-6	-2	3.8	15	2.4	4473	410	6325	24.9	
29	VEW	650	6507	325	8	13	7.0	30	2.5	4816b	147b	7834b	23.0	
30	HEIDELBERGER DRUCKMASCHINEN	671	6236	87	NA	NA	NA	NA	1.3	2837	198	3196	NA	
31	LINDE	672	6223	740	7	12	2.7	27	2.1	5355	232	4952	9.9	
32	DEGUSSA	708	5882	64	31	37	5.1	26	1.3	8606	213	5222	19.6	
33	MAN	720	5707	398	39	45	3.1	30	2.0	11978	177	7864	10.2	
34	AACHENER UND MUENCHENER BETEILIGUNG	724	5685	115	38	44	5.0	29	1.2	NA	169b	48910b	17.3	
35	PREUSSAG	742	5571	365	38	45	3.7	27	2.6	14953	223	8381	13.5	
36	BANKGESELLSCHAFT BERLIN	771	5333	24	7	11	1.2	15	3.6	NA	157	197266	8.0	
37	FRESENIUS MEDICAL CARE	782	5248	66	-23	-19	2.2	58	2.2	3257	90	5578	3.7	
38	BERLINER KRAFT & LICHT	783	5246	47	100	109	2.8	36	1.4	2296	103	5532	7.7	
39	BEIERSDORF	803	5136	61	15	20	5.7	40	1.3	3527	77	2198	14.3	
40	HEIDELBERGER ZEMENT	846	4860	100	18	23	3.0	21	1.4	4070	200	5971	14.4	
41	PORSCHE	851	4810	2748	128	138	15.4	60	0.4	2296	77	1371	25.4	
42	FRIED. KRUPP AG HOESCH-KRUPP	909	4431	204	10	15	2.8	14	2.2	14077	182	11015	19.7	
43	KARSTADT	917	4394	523	48	55	3.4	-45	1.5	13488b	33b	6454b	NEG	
44	LAHMEYER	933	4319	48	11	16	2.6	18	1.6	4878	233	5965	14.4	
45	FRESENIUS	937	4308	215	-3	2	9.1	36	0.8	4182	65	4990	25.3	
46	AXA COLONIA KONZERN	985	3991	132	37	43	4.4	23	1.2	5077	146	26524	19.1	

HONG KONG

COUNTRY COMPOSITE		128721	4	-40	-40	1.8	10	5.4	25339	14368	190059	17.8	
1	HONG KONG TELECOMMUNICATIONS	188	21440	2	-19	-19	5.4	10	6.1	4522c	2197c	6151	55.2d	
2	HUTCHISON WHAMPOA	200	20252	5	-37	-37	1.8	13	3.9	5754	1583	25906	14.3	
3	HANG SENG BANK	293	14258	7	-38	-38	2.2	12	5.9	NA	1208	51190	18.8	
4	CHEUNG KONG HOLDINGS	336	12423	5	-47	-47	1.1	5	3.9	1014	2272	13858	21.3	

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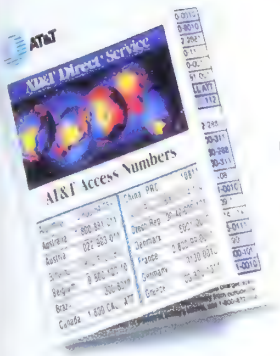

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THE BUSINESS WEEK GLOBAL 1000

		RANK 1000	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S. $	% CHANGE FROM 1997 (U.S. $)	% CHANGE FROM 1997 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S. $ MIL	ASSETS U.S. $ MIL	RETURN ON EQUITY %	INT
5	SUN HUNG KAI PROPERTIES	369	11533	5	-61	-61	0.7	6	7.0	3737	1827	24227	10.3	
6	CLP HOLDINGS	406	10661	4	-14	-14	2.1	10	4.6	2788	745	6865	20.8	
7	HENDERSON LAND DEVELOPMENT	686	6114	4	-64	-64	0.8	6	11.2	NA	1241	13255	13.5	
8	HONGKONG ELECTRIC HOLDINGS	704	5931	3	-18	-18	2.4	10	6.0	1041	608	4671	24.5	
9	SWIRE PACIFIC	719	5738	4	-56	-56	0.5	7	6.2	3163	862	15723	7.3	
10	HONG KONG & CHINA GAS	726	5673	1	-17	-17	2.7	19	3.5	721	295	2476	14.0	
11	CITIC PACIFIC	793	5175	2	-57	-57	1.0	10	3.7	2168	534	8790	10.3	
12	CHEUNG KONG INFRASTRUCTURE HOLDINGS	823	5004	2	-30	-30	2.1	16	1.9	432	311	2925	13.2	
13	NEW WORLD DEVELOPMENT	897	4519	2	-63	-63	0.5	7	6.6	NA	686	14022	8.3	
IRELAND														
COUNTRY COMPOSITE			33330	27	61	69	5.3	23	1.2	4936	1469	85771	23.1	
1	ALLIED IRISH BANKS	376	11339	13	74	86	4.4	20	1.9	NA	518	52293	22.6	
2	BANK OF IRELAND	474	9203	19	74	86	4.6	19	1.7	NA	501c	27839	24.7d	
3	ELAN	594	7238	61	50	50	8.3	32	0.0	389	180	1153	26.2	
4	CRH	746	5550	14	46	56	3.8	20	1.2	4547	271	4487	18.7	
ITALY														
COUNTRY COMPOSITE			370376	9	155	165	5.0	53	1.2	181429	9444	927715	13.9	
1	ENI	57	76424	7	41	46	4.2	19	2.3	34551	2913	51278b	21.9d	
2	TELECOM ITALIA	67	51301	8	48	54	3.5	28	1.4	24372	1963	43559	12.4	
3	TIM	80	44943	6	101	109	36.6	55	0.8	5383	885	4578	66.9	
4	ASSICURAZIONI GENERALI	114	33062	32	102	110	4.1	52	0.7	18250b	455b	76538b	7.8d	
5	FIAT GROUP	191	21291	4	49	55	1.9	18	1.5	50982	1376	60947b	10.6d	
6	CREDITO ITALIANO	259	16113	6	276	290	3.6	59	0.8	NA	274	99651b	6.2d	
7	ISTITUTO BANCARIO SAN PAOLO DI TORINO	321	12888	16	151	161	2.3	135	0.4	NA	96	146128	1.7	
8	ISTITUTO NAZIONALE DELLE ASSICURAZIONI	334	12470	3	125	134	1.9	38	1.3	4339	326	25627b	4.9d	
9	BANCA INTESA	353	12050	6	416	436	3.7	34	0.5	NA	400	33896b	10.7d	
10	BANCA DI ROMA	394	10963	2	188	199	1.5	-6	0.0	NA	-1796	122907b	NEG	
11	BANCA COMMERCIALE ITALIANA	411	10584	6	198	210	2.2	45	1.6	NA	236	101000b	4.9d	
12	ISTITUTO MOBILIARE ITALIANO	428	10264	17	99	106	2.6	24	2.3	NA	424	51900	10.6	
13	ALLEANZA ASSICURAZIONI	440	9891	14	120	128	10.4	54	0.7	1222b	140b	10670b	19.4d	
14	RIUNIONE ADRIATICA DI SICURTA (RAS)	506	8574	16	106	114	2.4	32	1.2	6862b	225b	24024b	7.6d	
15	MEDIOBANCA	556	7734	14	183	193	2.4	43	0.8	NA	165	22536	5.5	
16	MEDIASET	564	7615	6	50	56	3.7	29	2.0	1912	263	3289	12.9	
17	MONTEDISON	566	7584	1	126	135	1.8	9	1.7	13478	848	18124	19.2	
18	PIRELLI	662	6350	3	51	57	2.6	22	2.1	6422	262	6691	12.1	
19	EDISON	689	6105	10	102	110	3.9	27	1.3	1436	229	3188	14.6	
20	BANCA FIDEURAM	721	5693	6	142	151	10.1	48	1.0	NA	118	3130b	21.0d	
21	ALITALIA	738	5593	5	566	592	3.1	13	0.0	4448b	-685b	3440b	22.9d	
22	AUTOSTRADE CONCESSIONI E COSTRUZIONI	827	4967	4	131	139	2.8	33	1.9	1939	151	6595	8.5	
23	BENETTON GROUP	891	3961	22	62	68	4.0	24	1.4	2070	165	2200b	16.7d	
24	OLIVETTI	994	3955	1	286	301	3.5	434	0.0	3763	9	5820b	0.8d	
JAPAN														
COUNTRY COMPOSITE			1411212	715	-23	-8	3.0	55	0.9	1596463	14487	6012858	6.9	
1	NIPPON TELEGRAPH & TELEPHONE	8	130911	8227	-14	3	4.0	121	0.4	84845	1081	103727	3.3	
2	TOYOTA MOTOR	18	94345	25	-14	3	2.3	29	0.7	84293c	3279c	91689	8.0d	
3	BANK OF TOKYO-MITSUBISHI	68	48077	10	-41	-29	2.2	-13	0.6	NA	-3784c	623520	NEG	
4	SONY	103	34382	84	0	11	3.1	21	0.4	48786c	1603c	40994	14.4d	
5	HONDA MOTOR	111	33192	34	16	38	3.3	18	0.4	43373c	1881c	30248	18.8d	
6	MATSUSHITA ELECTRIC INDUSTRIAL	113	33080	16	-17	-1	1.2	49	0.6	56941c	676c	62757	2.5d	
7	SUMITOMO BANK	131	29356	9	-32	-20	2.1	119	0.7	NA	246	412149	1.7	
8	SEVEN-ELEVEN JAPAN	147	26688	44	11	5	9.7	61	0.5	11673	422	3823	16.0d	
9	TOKYO ELECTRIC POWER	151	25873	19	0	19	2.4	44	1.9	36373	589	102719	5.5	
10	SANWA BANK	154	25426	9	-31	-19	1.9	-20	0.7	NA	-1316c	382663	NEG	
11	TAKEDA CHEMICAL INDUSTRIES	174	22710	26	2	21	4.1	39	0.6	6075c	589c	8810	10.7d	
12	HITACHI LTD.	181	21993	7	-38	-26	0.9	876	1.2	60766c	25c	71914	0.1d	
13	NOMURA SECURITIES	189	21391	11	-8	9	2.0	42	0.7	NA	-1752	128984	NEG	
14	FUJITSU	190	21360	11	-6	12	2.5	530	0.6	36012c	40c	34119	0.5d	
15	ITO-YOKADO	196	20695	50	-13	4	3.2	41	0.5	22661c	509c	13219	7.8d	
16	CANON	197	20672	24	-6	12	2.6	24	0.5	19918	857	20654	10.8	
17	DAI-ICHI KANGYO BANK	211	19549	6	-35	-39	1.5	-38	1.0	NA	-520c	406261	NEG	
18	EAST JAPAN RAILWAY	217	18995	4749	1	14	3.7	37	0.8	18142	510	53292	9.8	
19	BRIDGESTONE	221	18784	23	1	20	4.1	66	0.4	15661	283	12717b	6.2d	
20	FUJI PHOTO FILM	238	17418	34	-13	4	1.8	27	0.5	9959c	641c	14329	6.6d	
21	NEC	257	16262	10	-27	-13	2.2	55	0.8	35362c	298c	34635	4.0d	
22	INDUSTRIAL BANK OF JAPAN	265	15579	6	-40	-39	1.4	11	1.0	NA	-1463c	338953	NEG	
23	KANSAI ELECTRIC POWER	266	15573	16	-15	1	1.8	39	2.3	18841	398	49738	4.5	
24	DENSO	272	15211	17	-32	-19	2.1	29	0.5	11727	515	12282	7.3	

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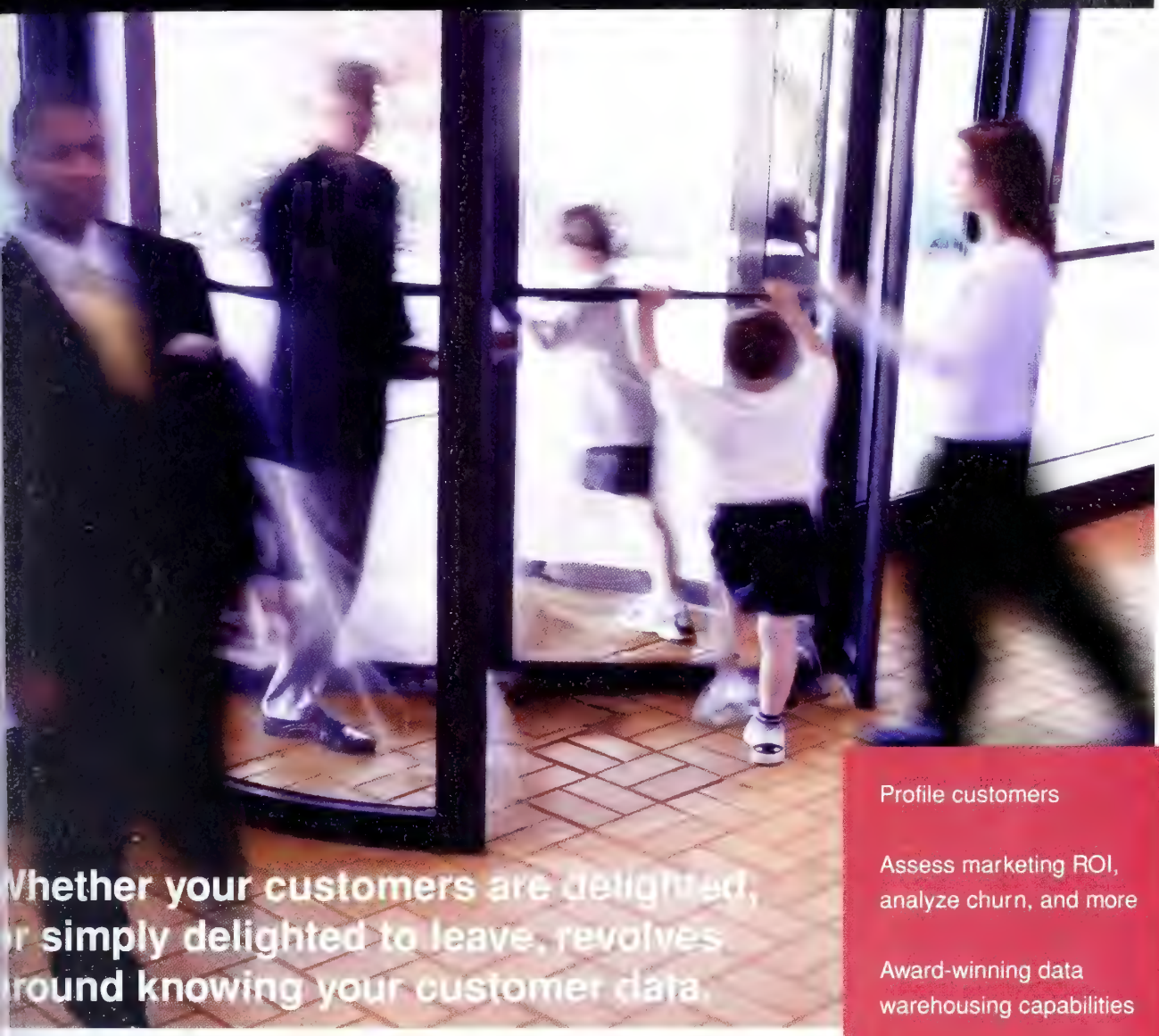
25	TOKIO MARINE & FIRE	285	14673	9	-19	-4	3.2	77	0.7	9595	190	37239	4.1	6
26	FUJI BANK	287	14563	5	-62	-55	1.0	-6	1.3	NA	-2492c	405666	NEG	6
27	JAPAN TOBACCO	302	13856	6928	-9	8	1.5	33	0.7	25981c	419c	15217	4.4d	4
28	TOSHIBA	307	13520	4	-32	-19	1.5	255	1.7	39404c	53c	41925	0.6d	3
29	NINTENDO	313	13240	93	20	42	3.3	28	0.8	3014	473	5309	11.6	4
30	SEIBU RAILWAY	316	13071	30	41	-30	69.3	NM	0.1	3909	-13	8874	NEG	5
31	DAI NIPPON PRINTING	331	12497	16	-18	-2	2.1	31	0.8	9454	405	10177	6.8	5
32	ROHM	345	12190	104	0	19	4.9	37	0.1	2149	329	3459	13.4	3
33	MITSUBISHI HEAVY INDUSTRIES	363	11732	3	-52	-42	1.2	27	2.1	22372c	437c	31478	4.5d	3
34	NIPPON STEEL	365	11685	2	-42	31	1.8	469	1.1	22093	25	32545	0.4	2
35	MITSUBISHI TRUST & BANKING	368	11560	9	-38	-26	2.2	25	0.7	NA	472c	134803	8.9d	6
36	MITSUBISHI ESTATE	372	11411	9	-36	-23	3.7	41	0.7	4035	277	14912	8.9	6
37	TOKAI BANK	380	11231	6	-33	-20	1.5	112	1.1	NA	103c	255478	1.3d	6
38	SAKURA BANK	388	11114	3	-50	-41	0.8	-18	2.1	NA	-637c	378483	NEG	6
39	SANKYO	390	11059	24	-24	-9	3.5	30	0.7	4306	368	5520	11.6	4
40	CHUBU ELECTRIC POWER	391	11049	15	-18	-3	1.6	40	2.4	15667	277	44716	4.1	1
41	TDK	419	10458	79	2	22	3.1	25	0.6	5028c	421c	4733	12.3d	3
42	NTT DATA	431	10152	40126	10	30	7.3	99	0.1	4414	103	6166	7.4	5
43	KIRIN BREWERY	447	9791	9	-6	12	1.8	53	0.9	10897	183	11007b	3.4d	4
44	MITSUBISHI CORP.	465	9455	6	-49	-39	1.2	28	1.0	114242c	344c	69714	4.3d	5
45	KYOCERA	471	9285	49	-32	-19	1.8	27	0.9	5234c	340c	7222	6.5d	3
46	KAO	472	9258	15	10	31	3.3	52	0.7	6547c	177c	5825	6.3d	4
47	ASAHI BANK	487	8923	4	-42	-32	1.2	-11	1.2	NA	-765c	214550	NEG	6
48	FANUC	492	8815	37	3	23	2.4	33	0.5	1666c	265c	4075	7.2d	3
49	SHIZUOKA BANK	501	8647	11	12	34	2.6	73	0.4	NA	118c*	56028*	3.5d	6
50	SHARP	510	8479	8	-42	-30	1.3	47	1.2	12918c	179c	14786	2.6d	4
51	CENTRAL JAPAN RAILWAY	525	8212	3666	NA	NA	2.5	31	1.0	9236	263	44550	8.0	5
52	MITSUI & CO.	532	8115	5	-42	-31	1.7	34	1.1	126439c	238c	54739	4.9d	1
53	KINKI NIPPON RAILWAY	549	7789	5	-20	-5	5.5	166	0.8	6854	47	11314	3.3	5
54	TOPPAN PRINTING	562	7632	11	-21	-6	1.7	22	0.9	9238c	342c	8313	7.7d	5
55	NISSAN MOTOR	563	7617	3	-54	-46	0.8	-75	2.4	47342c	-101c	53937	NEG	4
56	SUMITOMO ELECTRIC INDUSTRIES	565	7604	10	-34	-21	2.1	32	0.7	9382c	239c	9880	6.5d	1
57	YAMANOUCHI PHARMACEUTICAL	569	7526	22	-10	7	2.1	171	0.6	3445c	44c	6058	1.2d	4
58	WEST JAPAN RAILWAY	571	7506	3753	0	19	3.2	29	1.0	8727	257	19269	11.0	5
59	RICOH	575	7466	11	-18	-2	2.3	34	0.7	10104c	217c	11871	6.9d	1
60	SHIN-ETSU CHEMICAL	587	7317	19	-26	-12	2.4	24	0.3	5003c	303c	6720	10.0d	1
61	KYUSHU ELECTRIC POWER	606	7015	15	-16	0	1.5	25	2.4	10204	286	30040	6.1	1
62	TORAY INDUSTRIES	609	6979	5	-27	-13	2.0	39	1.0	7866c	179c	10049	5.2d	1
63	MURATA MFG.	610	6966	29	-26	-13	2.0	27	0.5	2386	235	4653	7.4	1
64	TOHOKU ELECTRIC POWER	622	6805	14	-21	-6	1.5	35	2.7	10912	197	27900	4.4	1
65	TAISHO PHARMACEUTICAL	633	6645	19	-23	-9	2.7	28	0.8	1732c*	239c*	3126*	9.7d	4
66	SECOM	638	6602	57	-21	-6	3.2	40	0.8	2192	165	3327	8.0	5
67	MITSUI FUDOSAN	641	6574	8	-36	-24	1.6	21	0.5	9171	-317	23445	NEG	5
68	SUMITOMO TRUST & BANKING	645	6546	5	-40	-29	1.3	-18	1.1	NA	-362c	105855	NEG	6
69	DDI	647	6532	2872	-61	-54	4.9	109	0.5	8516c	60c	7619	4.5d	1
70	ACOM	652	6497	44	0	19	3.5	20	0.7	NA	318c*	9053*	17.3d	6
71	ASAHI GLASS	663	6344	5	-44	-34	1.4	36	1.2	9651	174	12947	3.9	1
72	MATSUSHITA ELECTRIC WORKS	668	6261	8	-24	-10	1.6	25	1.1	8927	252	9234	6.5	1
73	ADVANTEST	685	6125	62	-0	19	5.9	20	0.4	1858c	314c	1527	30.0d	1
74	ASAHI BREWERIES	694	6071	13	-8	9	2.4	73	0.6	9454	83	12249b	3.3d	1
75	NIPPON EXPRESS	706	5900	5	-29	-16	2.7	30	0.9	12885	198	8004	9.1	1
76	TOKYO GAS	712	5820	2	-19	-3	1.9	52	1.7	7131	111	12789	3.7	1
77	MARUI	729	5650	15	-18	-2	1.9	41	1.0	3956c	139c	5412	4.7d	5
78	SUMITOMO CORP.	733	5631	5	-40	-29	1.4	30	1.1	90716c	186c	38949	4.6d	1
79	JUSCO	734	5626	17	-48	-39	2.3	69	0.9	16887c	81c	10788	3.3d	5
80	SANYO ELECTRIC	740	5590	3	-32	-19	1.0	40	1.3	12940	128	18172	2.5	1
81	TOKYO ELECTRON	748	5543	32	-37	-25	3.5	26	0.7	3288c	217c	2793	13.7d	1
82	AJINOMOTO	752	5460	8	-16	-0	2.0	42	0.9	6033c	130c	5774	4.7d	1
83	OSAKA GAS	753	5455	2	-18	-2	2.0	35	1.7	6160c	157c	8658	5.8d	1
84	SMC	762	5377	81	-1	18	4.5	39	0.2	1424c	139c	2471	11.7d	1
85	ALL NIPPON AIRWAYS	776	5300	4	-44	-33	5.3	171	0.0	7374	31	9149	3.1	2
86	MATSUSHITA COMMUNICATION INDUSTRIAL	777	5296	28	-11	5	3.1	23	0.4	6234c	229c	3532	13.4d	1
87	SEKISUI HOUSE	778	5281	7	-24	-10	0.9	18	1.8	10537c	287c	12915	5.0d	4
88	CHUGOKU ELECTRIC POWER	787	5222	14	-20	-5	1.6	27	2.6	7512	197	21262	5.9	1
89	KAWASAKI STEEL	790	5209	2	-45	-35	1.5	91	1.4	8877	58	15504	1.6	1
90	MITSUBISHI ELECTRIC	811	5083	2	-58	-50	0.9	-3	1.2	27424c	-764c	29629	NEG	1
91	DAIWA SECURITIES	813	5079	4	-48	-39	0.8	-8	1.1	NA	-604c	96893	NEG	6
92	TOYODA AUTOMATIC LOOM WORKS	822	5005	17	-20	-4	2.4	33	0.7	4133c	148c	4015	7.3d	1

Customer Relationship Management



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93	ASAHI CHEMICAL INDUSTRY	825	4987	3	-38	-26	1.6	27	1.3	9321	183	9028	5.7	2
94	SHISEIDO	837	4919	12	-20	-5	1.7	40	0.8	4481c	122c	4403	4.2d	4
95	SUMITOMO METAL INDUSTRIES	842	4881	2	-39	-28	1.3	169	1.4	10609c	29c	17582	0.7d	2
96	HACHIJUNI BANK	852	4807	8	-11	5	2.5	80	0.4	NA	60c*	39960*	3.1d	6
97	YAMATO TRANSPORT	868	4684	12	-4	15	2.7	40	0.9	5422c	117c	3967	6.8d	5
98	JAPAN TELECOM	869	4681	10464	-47	-37	2.1	80	0.4	2972c	59c	3398*	2.6d	5
99	NIKKO SECURITIES	875	4624	3	-47	-37	0.9	-9	1.2	NA	-512c	63872	NEG	6
100	PROMISE	887	4570	42	-4	15	2.7	16	1.1	NA	281c	7649	16.5d	6
101	JAPAN AIRLINES	889	4558	3	-40	-28	2.6	-44	0.0	11310	-104	14799	NEG	5
102	KEYENCE	892	4547	120	-16	-1	5.0	47	0.1	425	97	1015	10.6	3
103	NICHIEI	908	4433	67	-21	-6	3.6	24	0.7	NA	176	3530	15.4	6
104	SUMITOMO CHEMICAL	925	4365	3	-35	-23	2.1	27	1.3	7361c	160c	9802	7.8d	2
105	OJI PAPER	926	4363	4	-27	-13	1.3	55	1.7	9743c	79c	12902	2.4d	2
106	SONY MUSIC ENTERTAINMENT	929	4349	40	-15	1	2.6	17	0.6	1635c	262c	2121	15.6d	4
107	ORIX	946	4218	65	8	29	1.9	53	0.2	NA	80	36733	3.6	6
108	MATSUSHITA-KOTOBUKI ELECTRONICS INDUSTRIES	950	4200	27	-26	-12	2.9	28	0.4	4485	152	2796	10.4	4
109	TOYO TRUST & BANKING	966	4116	5	-26	-12	1.4	189	1.0	NA	22c	53551	0.8d	6
110	NIPPON PAPER INDUSTRIES	969	4094	4	-19	-4	1.7	20	1.3	7890	207	9225	8.6	2
111	MAZDA MOTOR	970	4093	3	12	33	1.7	-83	0.0	14722c	-49c	10229	NEG	4
112	DAIWA HOUSE INDUSTRY	971	4080	8	-34	-21	1.0	13	1.6	8576	306	8270	7.3	3
113	NIPPON YUSEN	972	4077	3	-16	-0	2.4	79	0.8	7794c	52c	10293	3.0d	5
114	MINEBEA	975	4066	10	5	25	4.5	63	0.5	2186	64	4065	7.2	3
115	KOMATSU	977	4060	4	-45	-34	1.1	29	1.4	7939c	139c	10917	3.6d	3
116	OMRON	995	3953	15	-25	-11	1.7	33	0.6	4289	114	4260	5.1	3
NETHERLANDS														
COUNTRY COMPOSITE			**523842**	**61**	**40**	**46**	**9.5**	**33**	**1.4**	**309218**	**26610**	**1112829**	**27.7**	
1	ROYAL DUTCH PETROLEUM (1)	NR	122312	57	18	24	3.4	27	2.7	128155	7753	112758	12.3	
2	ING GROEP	43	64084	69	55	63	2.5	25	1.9	NA	2020	308797	10.1	6
3	UNILEVER NV (2)	NR	50918	80	65	73	7.3	16	1.4	47084	5436	31960	46.3	4
4	AEGON	74	46499	80	119	129	5.2	38	1.2	10455	1099	135750	13.5	6
5	PHILIPS ELECTRONICS	102	34756	95	74	82	3.6	20	1.1	38053	1638	29586	18.2	4
6	ABN AMRO HOLDING	104	34185	24	31	37	2.7	19	2.5	NA	1828	416326	14.4	6
7	KONINKLIJKE PTT NEDERLAND	148	26420	56	60	67	3.0	20	2.8	7590	1339	18668	15.3	
8	KONINKLIJKE AHOLD	232	17612	32	25	31	6.9	36	1.2	25170	465	9377	19.4	
9	AKZO NOBEL	277	14918	209	57	64	3.3	18	2.0	11972	804	10681	18.6	3
10	HEINEKEN	352	12065	38	42	49	4.8	32	0.7	6725	379	5603	14.9	4
11	FORTIS AMEV (4)	NR	11056	60	46	53	3.3	21	1.9	NA	503	3565b	15.7d	6
12	ELSEVIER (5)	NR	10391	16	-8	-4	8.4	23	3.0	5572	991	8158	36.7	
13	POLYGRAM	451	9748	54	15	20	4.7	29	0.9	5522	392	5630	16.4	4
14	WOLTERS KLUWER	456	9615	141	17	22	10.7	33	1.1	2593	293	4137	32.4	
15	BAAN	479	9064	46	59	66	30.7	134	0.0	684	77	723	23.0	
16	DORDTSCHE PETROLEUM	538	8030	54	8	14	19.2	45	2.9	NA	176b	408b	43.2	
17	VNU	648	6508	34	52	59	14.8	33	1.0	1951	198	1435	45.0	
18	RANDSTAD HOLDING	699	6010	56	38	45	17.9	47	0.9	3520	128	1003	38.2	
19	ASM LITHOGRAPHY HOLDING	727	5660	41	62	70	11.8	35	0.0	897	164	728	34.1	
20	HEINEKEN HOLDING	774	5307	34	44	51	4.7	33	0.8	NA	163b	1149b	14.5	
21	VENDEX INTERNATIONAL	792	5195	68	20	26	5.9	15	2.0	4591c	347c	1907c	39.2	
22	HAGEMEIJER	873	4629	45	-9	-4	6.1	25	1.5	5707	185	2996	24.5	
23	GETRONICS	907	4449	50	46	53	29.2	49	0.4	1382	90	510	59.9	
24	KONINKLIJKE NUMICO	913	4412	35	13	18	18.4	31	1.1	1594	143	972	59.7	
NEW ZEALAND														
COUNTRY COMPOSITE			**8065**	**5**	**-4**	**24**	**9.6**	**18**	**4.6**	**1819**	**436**	**2472**	**52.1**	
1	TELECOM CORP. OF NEW ZEALAND	536	8065	5	-4	24	9.6	18	4.6	1819c	436c	2472	52.1d	
NORWAY														
COUNTRY COMPOSITE			**14823**	**34**	**-2**	**3**	**2.4**	**15**	**1.7**	**16879**	**969**	**18724**	**16.9**	
1	NORSK HYDRO	424	10401	45	-9	-4	2.0	17	2.2	12768	628	13830	11.9	
2	ORKLA	911	4422	23	4	10	2.9	13	1.2	4112	340	4894	22.0	
PORTUGAL														
COUNTRY COMPOSITE			**36241**	**37**	**85**	**96**	**4.0**	**28**	**2.0**	**5623**	**1159**	**73443**	**14.6**	
1	ELECTRICIDADE DE PORTUGAL (EDP)	262	15785	26	NA	NA	2.3	30	2.3	3132	510	13078b	7.7	
2	PORTUGAL TELECOM	435	9997	53	37	45	5.0	26	1.8	2491b	301b	4786b	19.3	
3	BANCO COMERCIAL PORTUGUES (BCP)	665	6318	33	109	121	4.7	29	1.6	NA	198	32377	16.4	
4	BANCO ESPIRITO SANTO E COMERCIAL LISBOA	961	4140	35	111	123	3.8	25	2.3	NA	150	23202	15.0	

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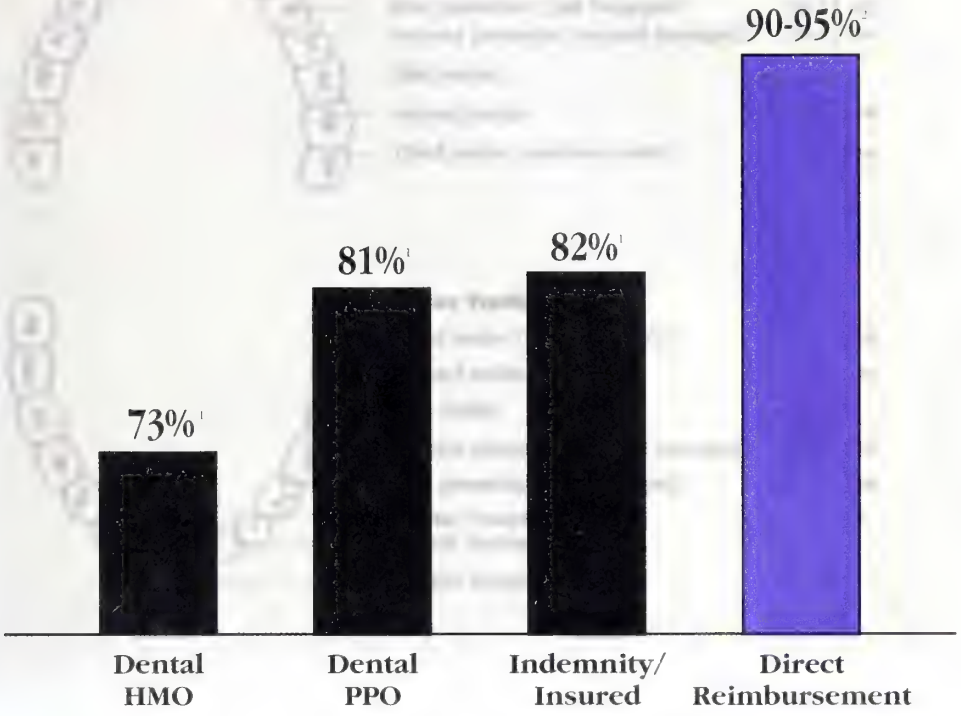
THE BUSINESS WEEK GLOBAL 1000

COUNTRY RANK	GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S. $	% CHANGE FROM 1997 (U.S. $)	% CHANGE FROM 1997 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S. $ MIL	ASSETS U.S. $ MIL	RETURN ON EQUITY %	IND
SINGAPORE													
COUNTRY COMPOSITE		**39000**	**4**	**-41**	**-31**	**2.2**	**16**	**1.6**	**7566**	**2355**	**83257**	**13.3**	
1 SINGAPORE TELECOMMUNICATIONS	187	21499	1	-22	-9	5.2	19	1.6	2952c	1127c	6983c	27.4	
2 SINGAPORE AIRLINES	600	7125	6	35	-23	1.1	11	1.8	4614c	620c	8674	9.9d	
3 DEVELOPMENT BANK OF SINGAPORE	744	5555	6	-44	-35	1.3	19	1.1	NA	261	33296b	6.8d	
4 OCBC OVERSEAS CHINESE BANK	850	4820	4	-62	-55	1.3	14	1.8	NA	347	34303	9.1	
SPAIN													
COUNTRY COMPOSITE		**210886**	**48**	**66**	**74**	**4.0**	**28**	**1.8**	**56467**	**7043**	**590488**	**14.7**	
1 TELEFONICA	78	45854	45	59	67	2.9	34	1.5	15617	1256	41135	8.8	
2 BANCO BILBAO VIZCAYA	105	34025	50	113	123	6.0	37	1.3	NA	865	139602	16.0	
3 BANCO DE SANTANDER	135	28930	50	77	86	5.1	31	1.7	NA	731	171464	16.6	
4 ENDESA	162	24950	24	25	32	2.7	22	2.1	8475	1102	25035b	11.8d	
5 REPSOL	250	16694	56	33	39	3.1	19	2.4	21208	833	14265b	16.3d	
6 IBERDROLA	278	14895	17	34	41	1.9	22	3.0	5354	670	17738b	8.9d	
7 BANCO CENTRAL	350	12094	33	108	118	3.1	39	1.3	NA	284	77576	8.0	
8 ARGENTARIA, CORP. BANCARIA DE ESPANA	420	10452	85	71	79	2.7	24	2.3	NA	416	72702b	11.1d	
9 GAS NATURAL SDG	429	10219	68	43	50	4.9	29	0.7	2831	335	5985b	17.0d	
10 BANCO POPULAR ESPANOL	493	8800	79	49	57	6.1	20	2.5	NA	436	22920	31.0	
11 TABACALERA	987	3973	22	112	122	5.0	32	1.6	2982	115	2065	15.9	
SWEDEN													
COUNTRY COMPOSITE		**247931**	**35**	**41**	**43**	**4.4**	**48**	**1.9**	**140657**	**12625**	**574943**	**21.0**	
1 L. M. ERICSSON	60	55624	29	62	64	8.7	35	0.8	21420	1525	18828	24.7	
2 ASTRA	115	32854	20	24	26	5.9	25	1.1	5734	1303	7953	23.8	
3 ABB AB (3)	NR	15117	16	19	21	6.2	51	1.7	31265	572	29784	12.3	
4 VOLVO	297	14071	32	14	15	1.9	15	2.0	23449	1323	20853	12.8	
5 HENNES & MAURITZ	367	11624	56	72	74	15.6	54	0.7	2300	216	1141	28.9	
6 INVESTOR	386	11116	56	12	13	3.2	142	2.3	NA	26	7415b	2.2d	
7 FOERENINGSSPARBANKEN	412	10582	30	61	63	3.2	80	2.6	NA	129	85351	4.0	
8 SVENSKA HANDELSBANKEN	436	9989	42	59	61	2.6	12	2.0	NA	767	109753	21.0	
9 SKANDINAVISKA ENSKILDA BANKEN	444	9803	17	61	63	2.9	19	2.3	NA	452	85442	15.2	
10 NORDBANKEN HOLDING	478	9066	7	60	62	3.1	13	2.7	NA	1195	108457	24.2	
11 SANDVIK	548	7841	30	17	19	3.9	22	3.0	4357	348	5116	18.1	
12 SKANDIA FORSAKRING	574	7483	15	107	109	4.3	13	0.7	1933	434	37120	33.1	
13 ELECTROLUX	588	7294	100	67	69	2.9	27	1.6	14430	228	10170	10.7	
14 INCENTIVE	688	6106	89	0	2	3.4	4	1.4	2489	1471	4431b	82.4d	
15 SVENSKA CELLULOSA AKTIEBOLAGET	755	5445	28	31	33	1.8	13	2.7	7483	352	9029	14.2	
16 SKANSKA	761	5380	47	19	21	2.7	5	3.0	7004	958	6717	52.3	
17 ATLAS COPCO	766	5355	29	8	9	3.3	18	1.9	3835	282	4443	18.4	
18 STORA KOPPARBERGS BERGSLAGS	789	5214	16	9	11	1.4	23	3.0	5678	202	8364	6.3	
19 SYDKRAFT	806	5122	27	16	18	2.6	12	2.0	1853	442	5373b	22.6d	
20 SCANIA	830	4961	25	-11	-10	4.2	20	2.8	5072	253	4882	21.4	
21 NETCOM SYSTEMS	996	3950	38	169	173	9.8	426	0.0	515	6	1109	2.3	
22 AGA	999	3935	16	21	23	2.7	25	2.4	1840	140	3213	10.5	
SWITZERLAND													
COUNTRY COMPOSITE		**586071**	**2001**	**50**	**57**	**4.6**	**13**	**1.0**	**183814**	**16863**	**1503503**	**15.1**	
1 NOVARTIS	11	116174	1698	25	30	6.9	33	1.0	21088	3524	35052	20.8	
2 ROCHE HOLDING	15	98901	16570	26	32	12.1	49	0.3	12692	2893	37046	24.4	
3 NESTLE	27	84399	2146	72	80	5.4	31	1.1	47341	2709	36980	17.4	
4 CREDIT SUISSE GROUP	52	58592	220	75	83	4.5	219	1.5	NA	269	466365	2.0	
5 UBS	81	43186	1684	54	60	3.1	-495	2.0	NA	-87	390624	NEG	
6 SWISS RE	109	33747	2308	72	80	5.5	24	1.3	9097b	987b	43858b	23.2d	
7 ZURICH INSURANCE GROUP	133	29342	626	70	78	3.3	24	1.0	20935	1208	88553b	13.4d	
8 SWISS BANK CORP.	138	28764	362	54	61	4.2	20	2.2	NA	1428	296867	20.9	
9 ABB AG (3)	NR	15720	1698	27	32	6.2	52	1.6	31265	572	29784	11.9	
10 CLARIANT	460	9512	1308	106	115	5.4	33	0.7	6888	285	7062b	16.2d	
11 CIBA SPEZIALITAETENCHEMIE HOLDING	463	9474	143	51	57	3.2	25	1.0	5291	386	6719	13.2	
12 HOLDERBANK FINANCIERE GLARUS	477	9093	1281	46	53	3.1	22	1.1	NA	418	11608b	14.3d	
13 ALUSUISSE-LONZA GROUP	514	8397	1346	43	49	4.5	27	0.0	6001	313	5620	16.7	
14 COMPAGNIE FINANCIERE RICHEMONT	523	8229	1433	5	10	2.3	14	1.1	7755	494	8184	16.3	
15 ADECCO	624	6784	413	10	15	4.3	32	0.9	7732	204	3299b	13.6d	
16 ARES-SERONO	692	6081	1623	19	25	9.5	68	0.3	864	88	1414	14.0	
17 S.M.H.	713	5820	864	46	53	3.4	26	0.8	2073	223	2333b	13.1d	
18 BALOISE HOLDING	844	5172	2384	121	131	1.5	26	1.2	4793b	129b	26718	5.8	
19 PHARMA VISION 2000	853	4787	642	17	22	2.2	NA	0.0	NA	362*	3003*	NA	
20 BK VISION	951	4198	1272	68	76	2.1	NA	0.0	NA	458*	2414*	NA	

ADA

American Dental Association

DENTAL CHART.



[1]Source: National Association of Dental Plans
[2]Source: American Dental Association

Percentage of money that goes to actual dental care

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THE BUSINESS WEEK GLOBAL 1000

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UNITED STATES														
COUNTRY COMPOSITE			8920640	205	37	37	5.6	28	1.4	4212772	337400	12302064	22.4	
1	GENERAL ELECTRIC	1	271638	83	38	38	7.9	32	1.4	90840	8203	304012	24.4	7
2	MICROSOFT	2	208984	85	37	37	20.8	53	.0.0	11358	3454	14387	39.4	5
3	COCA-COLA	4	193535	78	14	14	26.5	48	0.8	18868	4129	16940	54.7	4
4	EXXON	5	172499	71	19	19	4.0	21	2.3	120279	8460	96064	18.7	1
5	MERCK	6	139845	117	30	30	11.1	30	1.5	23637	4614	25812	37.5	4
6	PFIZER	7	133026	105	104	104	16.6	57	0.7	12504	2213	15336	29.0	4
7	WAL-MART STORES	9	123470	55	85	85	6.7	33	0.6	117958c	3526c	45384c	20.1	5
8	INTEL	10	121158	71	-6	-6	6.0	19	0.2	25070	6945	28880	32.2	3
9	PROCTER & GAMBLE	12	112475	84	22	22	11.1	31	1.2	35764	3415	27544	35.4	4
10	INTERNATIONAL BUSINESS MACHINES	13	110791	118	36	36	5.8	19	0.8	78508	6093	81499	30.0	3
11	BRISTOL-MYERS SQUIBB	14	106994	108	47	47	14.8	32	1.5	16701	3205	14977	45.9	4
12	AT&T	16	98873	61	66	66	4.4	21	2.2	51319	4472	58635	20.7	5
13	LUCENT TECHNOLOGIES	19	93068	71	123	123	26.9	47	0.2	26360	1565	23811	56.9	3
14	JOHNSON & JOHNSON	20	92866	69	15	15	7.5	27	1.5	22629	3303	21453	27.6	4
15	PHILIP MORRIS	21	90745	37	-15	-15	6.1	14	4.3	56114	6310	55947	43.1	4
16	BERKSHIRE HATHAWAY (8)	22	87739	70700	64	64	2.5	37	0.0	10430	1902	56111	6.8	7
17	DUPONT	23	87106	77	42	42	7.9	38	1.8	39730	2405	42942	20.7	2
18	AMERICAN INTERNATIONAL GROUP (8)	25	86623	124	37	37	3.5	25	0.2	30489	3332	163970	13.8	6
19	CISCO SYSTEMS	30	77363	76	67	67	17.7	46	0.0	6440	1414	5452	38.9	3
20	WALT DISNEY	31	77206	113	38	38	4.4	41	0.6	22473	1886	37776	10.8	5
21	NATIONSBANK	33	72647	76	28	28	2.6	19	2.0	NA	3077	264562	13.2	6
22	SBC COMMUNICATIONS	34	71485	39	33	33	7.2	44	2.4	24856	1474	42132	16.4	5
23	BELL ATLANTIC	35	71118	92	31	31	5.6	28	3.4	30194	2455	53964	20.1	5
24	TRAVELERS GROUP	36	70440	61	67	67	3.6	21	0.8	NA	3104	386555	17.3	6
25	ELI LILLY	37	67968	61	32	32	14.7	-236	1.3	8518	-385	12577	NEG	4
26	CITICORP	38	67390	149	30	30	3.5	17	1.5	NA	4147	310897	20.5	6
27	GILLETTE	41	65790	117	32	32	13.8	45	0.9	10062	1427	10864	30.8	4
28	HEWLETT-PACKARD	42	64310	62	21	21	4.0	22	1.0	42895	3119	31749	18.2	3
29	BELLSOUTH	44	63861	65	42	42	4.2	18	2.2	20561	3270	36301	22.9	5
30	AMERICAN HOME PRODUCTS	45	63415	48	27	27	7.7	30	1.8	14196	2043	20825	25.9	4
31	FORD MOTOR	46	62924	52	107	107	2.0	9	3.2	153627	6920	279097	22.9	4
32	FANNIE MAE	47	61843	60	37	37	4.9	20	1.6	NA	3069	391673	24.2	6
33	SCHERING-PLOUGH	48	61353	84	84	84	21.7	40	1.1	6778	1444	6507	53.8	4
34	MOBIL	49	60948	78	12	12	3.3	20	2.9	58399	3272	43559	16.5	1
35	PEPSICO	51	60853	41	20	20	8.8	35	1.3	20917	1730	20101	25.5	4
36	CHASE MANHATTAN	53	58008	136	44	44	2.9	15	2.1	NA	3849	365521	18.8	6
37	HOME DEPOT	54	57622	79	87	87	8.1	46	0.3	24156c	1160c	11229c	17.4	5
38	ABBOTT LABORATORIES	55	57257	74	18	18	11.3	27	1.6	11883	2094	12061	42.8	4
39	BANKAMERICA	56	56451	83	42	42	3.0	18	1.7	NA	3210	260159	16.5	6
40	GTE	58	56131	58	32	32	7.0	20	3.2	23260	2794	42142	34.3	5
41	FIRST UNION	62	53329	55	29	29	3.5	19	2.7	NA	2709	205735	18.3	6
42	DELL COMPUTER	63	52766	82	193	193	70.7	51	0.0	12327c	944c	4268	139.9d	
43	WARNER-LAMBERT	64	52294	64	90	90	18.4	188	1.0	8179	870	8031	9.8	
44	CHEVRON	65	52242	80	14	14	3.0	16	3.1	35009	3180	35473	18.2	
45	GENERAL MOTORS	69	48040	72	32	32	3.1	8	2.8	178174	6698	228888	37.1	
46	AMERICAN EXPRESS	70	47325	103	48	48	5.0	24	0.9	NA	1991	120003	21.0	
47	WORLDCOM	71	46960	46	54	54	3.1	455	0.0	7351	384	22390	0.7	
48	MORGAN STANLEY DEAN WITTER	72	46904	78	88	88	3.6	17	1.0	NA	2649	302287	20.7	
49	AMERITECH	73	46565	42	29	29	6.0	21	2.8	15998	2296	25339	29.0	
50	BOEING	75	46496	48	-9	-9	3.7	-69	1.2	45800	-178	38024	NEG	
51	TIME WARNER	76	45972	78	67	67	4.8	-134	0.5	13294	101	34163	NEG	
52	McDONALD'S	79	45113	66	31	31	5.1	27	0.6	11409	1643	18242	18.5	
53	COMPAQ COMPUTER	82	41583	27	27	27	4.4	24	0.2	24584	2107	14631	18.0	
54	AMOCO	85	40124	42	-6	-6	2.5	17	3.6	31910	2720	32489	14.8	
55	ALLSTATE	86	39515	94	28	28	2.6	12	1.2	18604	3105	80918	20.8	
56	SCHLUMBERGER	88	38898	78	31	31	5.8	27	1.0	10648	1296	12097	21.1	
57	MCI COMMUNICATIONS	89	38732	53	39	39	3.3	NM	0.1	19653	149	25510	0.0	
58	MINNESOTA MINING & MFG.	95	37470	93	1	1	6.3	18	2.4	15070	2121	13238	35.1	
59	BANC ONE	98	36153	55	40	40	3.5	24	2.8	NA	1306	115901	14.2	
60	CHRYSLER	99	35905	56	75	75	3.2	13	2.9	61147	2805	60418	24.6	
61	XEROX	107	33767	103	52	52	6.7	23	1.4	18166	1452	27732	28.8	
62	MONSANTO	112	33166	55	37	37	8.0	49	0.2	7514	749	10774	16.5	
63	TYCO INTERNATIONAL	117	32289	55	74	74	6.8	-43	0.2	7588a	-777a	10447	NEG	
64	MOTOROLA	118	31677	53	-20	20	2.4	31	0.9	29794	1180	27278	7.8	
65	TEXACO	120	31249	58	6	6	2.5	13	3.1	46667	2664	29600	19.8	
66	SPRINT	121	30945	72	47	47	3.4	35	1.4	14874	953	18185	9.7	
67	MERRILL LYNCH	123	30923	89	69	69	3.8	16	1.1	NA	1906	292819	24.4	
68	WELLS FARGO	124	30897	362	37	37	2.5	28	1.4	NA	1155	97456	8.7	

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THE BUSINESS WEEK GLOBAL 1000

COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S. $	% CHANGE FROM 1997 (U.S. $)	% CHANGE FROM 1997 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S $ MIL	ASSETS U.S $ MIL	RETURN ON EQUITY %	INDU / CO
69	FREDDIE MAC	125	30877	46	38	38	5.2	23	1.1	NA	1395	194597	22.9	€
70	NORWEST	129	29420	39	45	45	4.3	21	1.7	NA	1351	88540	20.3	€
71	U. S. BANCORP	134	29066	39	43	43	4.9	33	1.8	NA	839	71295	14.8	€
72	COMPUTER ASSOCIATES INTERNATIONAL	139	28668	53	44	44	19.0	24	0.2	4719c	1190c	6084	78.8d	5
73	SARA LEE	141	27858	59	44	44	6.6	27	1.6	19734	1009	12953	24.3	4
74	KIMBERLY-CLARK	142	27613	50	–1	–1	6.7	33	2.0	12547	884	11266	20.0	4
75	AIRTOUCH COMMUNICATIONS	143	27262	48	71	71	5.4	50	0.0	3594	448	8970	10.7	5
76	EMERSON ELECTRIC	145	26895	61	13	13	4.9	23	1.9	12299	1122	11463	21.6	3
77	MEDTRONIC	149	26117	56	50	50	14.9	45	0.4	2438	530	2409	33.2	4
78	ASSOCIATES FIRST CAPITAL	150	25925	75	58	58	4.1	24	0.5	NA	1032	57233	17.2	€
79	COLGATE-PALMOLIVE	152	25762	87	40	40	14.3	34	1.3	9057	740	7539	41.6	4
80	ATLANTIC RICHFIELD	158	25309	79	8	8	2.9	17	3.6	18864	1889	25322	17.5	1
81	FIRST CHICAGO NBD	161	25111	87	48	48	3.3	17	2.0	NA	1525	114096	19.1	€
82	CAMPBELL SOUP	163	24750	55	24	24	18.3	34	1.5	7964	713	6459	54.0	4
83	U S WEST	164	24611	51	39	39	5.9	21	4.2	10319	1180	17246	28.2	5
84	ALLIEDSIGNAL	165	24167	43	11	11	5.4	20	1.4	14472	1170	13707	27.2	
85	SEARS, ROEBUCK	166	24160	62	26	26	4.1	20	1.5	41296	1303	38700	21.0	5
86	FLEET FINANCIAL GROUP	168	23302	82	34	34	2.9	17	2.4	NA	1303	85535	17.3	€
87	EASTMAN KODAK	170	23032	71	–14	–14	7.3	275	2.5	14538	5	13145	2.7	4
88	ORACLE	171	22998	24	–24	–24	9.8	31	0.0	5684	821	4624	31.4	5
89	BANK OF NEW YORK	172	22977	61	43	43	4.6	21	1.7	NA	1104	59961	22.2	€
90	CBS	173	22800	32	57	57	2.8	NM	0.0	5363	–131	16715	NEG	5
91	MEDIAONE GROUP	175	22567	37	86	86	3.2	–40	0.0	5043	–480	22614	NEG	5
92	PHARMACIA & UPJOHN	176	22447	44	28	28	4.3	72	2.4	6586	323	10380	5.9	4
93	ANHEUSER-BUSCH	177	22322	46	7	7	5.5	19	2.3	11066	1179	11727	29.0	4
94	NATIONAL CITY	178	22274	68	32	32	3.3	21	2.7	NA	807	54684	15.9	€
95	J. P. MORGAN	180	22158	124	15	15	2.0	16	3.1	NA	1507	262159	12.7	€
96	LOCKHEED MARTIN	182	21949	112	20	20	4.2	17	1.4	28069	1300	28361	25.0	3
97	DOW CHEMICAL	183	21809	97	16	16	2.9	12	3.6	20018	1808	24040	23.0	3
98	UNITED TECHNOLOGIES	185	21574	94	17	17	5.3	20	1.3	24495	1072	16719	26.1	3
99	GAP	192	21271	54	136	136	13.4	36	0.4	6508c	534c	3338	37.1d	5
100	COLUMBIA/HCA HEALTHCARE	193	21035	33	–10	–10	2.9	25	0.2	18819	1064	22002	11.5	
101	DUKE ENERGY	195	20769	58	28	28	2.8	23	3.8	16309	974	24029b	12.5d	
102	EMC	198	20622	41	108	108	8.7	36	0.0	2938	539	3490	24.3	
103	DAYTON HUDSON	199	20345	46	93	93	5.7	26	0.8	27757c	802c	13389	22.2d	
104	CARNIVAL	202	20152	68	78	78	5.6	29	0.9	2448	666	5427	19.0	
105	CATERPILLAR	203	20140	55	13	13	4.3	12	1.8	18925	1665	20756	35.9	
106	TEXAS INSTRUMENTS	205	20087	51	15	15	3.4	58	0.7	9750	302	10849	5.8	
107	HUGHES ELECTRONICS (8)	208	19795	50	–10	–10	2.4	46	2.0	5128	427	12764	5.1	
108	VIACOM	210	19614	55	85	85	1.6	57	0.0	13206	375	28289	2.8	
109	H. J. HEINZ	213	19404	53	23	23	8.0	27	2.4	9357	864	8438	29.9	
110	AUTOMATIC DATA PROCESSING	214	19344	64	30	30	7.0	33	0.8	4112	514	4383	21.2	
111	GANNETT	218	18905	67	44	44	5.4	26	1.1	4729	713	6890	21.2	
112	CENDANT	222	18514	22	–5	–5	7.0	20	0.0	5315	872	2473	34.7	
113	SOUTHERN CO.	223	18443	27	26	26	2.0	18	5.0	12680	972	30292b	10.9d	
114	RAYTHEON	225	18375	53	NA	NA	1.7	16	1.5	13674	849	28598	11.0	
115	WASHINGTON MUTUAL	226	18226	71	27	27	3.5	33	1.7	NA	482	96981	10.8	
116	J. C. PENNEY	228	18109	72	39	39	2.9	22	3.0	30546c	839c	23493	13.5d	
117	AMERICA ONLINE	229	18012	83	202	202	130.2	29	0.0	1685	–17	847	454.7	
118	TELE-COMMUNICATIONS	230	17923	34	127	127	–38.4	–118	0.0	6429	–495	23671	NA	
119	ELECTRONIC DATA SYSTEMS	231	17885	36	–3	–3	3.4	25	1.7	15236	731	11174	13.5	
120	MELLON BANK	234	17548	67	54	54	4.7	22	2.1	NA	771	44892	21.1	
121	SAFEWAY	235	17512	36	62	62	8.1	26	0.0	22484	622	8494	31.5	
122	WALGREEN	237	17476	35	51	51	7.3	37	0.7	13363	436	4207	19.8	
123	PNC BANK	239	17370	58	38	38	3.2	17	2.7	NA	1052	75120	19.0	
124	AMERICAN GENERAL	242	17028	67	52	52	2.5	29	2.2	3362b	542b	80620b	8.4d	
125	KELLOGG	243	16905	41	12	12	17.0	30	2.2	6830	564	4878	57.6	
126	GENERAL RE	245	16823	220	25	25	2.1	18	1.1	6607	968	41459	11.7	
127	KEYCORP	249	16695	38	40	40	3.2	18	2.5	NA	919	73699	18.1	
128	SUNTRUST BANKS	251	16677	79	48	48	5.3	24	1.3	NA	667	57983	21.9	
129	WACHOVIA	252	16503	80	32	32	3.2	27	2.2	NA	593	65397	11.8	
130	ILLINOIS TOOL WORKS	253	16493	66	33	33	5.9	27	0.7	5220	587	5395	21.9	
131	TRAVELERS PROPERTY CASUALTY (8)	254	16368	42	8	8	2.0	13	1.0	9911	1236	50682	16.2	
132	BESTFOODS	256	16298	56	41	41	9.4	28	1.6	8400	585	6100	33.9	
133	BAXTER INTERNATIONAL	258	16252	57	8	8	6.1	51	2.0	6138	300	8707	12.0	
134	MBNA	261	15881	32	40	40	8.1	25	1.1	NA	623	21306	32.1	
135	BURLINGTON NORTHERN SANTA FE	263	15680	100	20	20	2.6	16	1.2	8413	885	21336b	16.1d	
136	ENRON	264	15620	50	23	23	2.6	557	1.9	20273	105	23422	0.5	
137	BANKBOSTON	267	15474	105	44	44	3.5	17	2.2	NA	879	69268	20.3	
138	AMGEN	269	15371	61	–10	–10	7.3	24	0.0	2401	644	3110	30.1	
139	EQUITABLE	271	15330	69	119	119	3.2	17	0.3	602	735	151438	18.9	
140	SUN MICROSYSTEMS	273	15176	40	24	24	5.4	22	0.0	8598	762	4697	24.9	

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THE BUSINESS WEEK GLOBAL 1000

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141	MARSH & McLENNAN	276	14981	88	33	33	4.7	33	1.8	NA	399	7914	14.2	63
142	MAY DEPARTMENT STORES	280	14876	64	37	37	3.9	19	2.0	12352c	779c	9930c	20.2	54
143	FIRST DATA	281	14845	33	-17	-17	4.1	41	0.2	NA	357	15315	9.9	52
144	WASTE MANAGEMENT	282	14807	33	2	2	11.0	-12	0.1	9189	-1269	13589	NEG	52
145	CIGNA	283	14752	69	18	18	2.1	12	1.7	14935	1086	108199b	18.2d	63
146	COCA-COLA ENTERPRISES	289	14526	38	78	78	8.2	94	0.3	11278	171	17487	8.7	43
147	HOUSEHOLD INTERNATIONAL	290	14523	135	38	38	3.2	20	0.4	NA	687	30303	16.2	62
148	INTERNATIONAL PAPER	296	14144	46	-4	-4	1.6	41	2.2	20100	292	26754	3.9	23
149	AMR	300	14035	154	55	55	2.1	12	0.0	18570	985	20915	17.6	56
150	LOWE'S	301	13904	79	101	101	5.3	36	0.3	10137c	357c	5219c	14.7	54
151	WILLIAMS	303	13752	32	47	47	3.3	26	1.9	6843b	493b	15633	12.8	11
152	CVS	309	13489	70	47	47	5.4	206	0.6	12738	37	5757b	2.6d	54
153	CONAGRA	310	13391	29	-3	-3	5.3	21	2.1	24002	615	11277	25.7	44
154	CHUBB	311	13373	80	30	30	2.4	18	1.6	5157	770	19616	13.5	63
155	NIKE	314	13235	46	-20	-20	4.2	22	1.0	9187	796	5361	19.0	46
156	PHILLIPS PETROLEUM	317	13020	50	17	17	2.7	13	2.7	15210	959	13860	20.3	11
157	HARTFORD FINANCIAL SERVICES GROUP	318	12970	110	41	41	2.1	13	1.5	10323	964	131743	16.9	63
158	PPG INDUSTRIES	320	12925	73	25	25	5.2	18	2.0	7379	714	6868	29.3	22
159	DEERE	322	12868	52	1	1	3.1	13	1.7	11082	960	16320	24.9	38
160	PITNEY BOWES	323	12858	47	34	34	7.0	25	1.9	4100	526	7893	28.0	33
161	COMCAST	325	12620	34	94	94	11.0	-48	0.3	4913	-209	12804	NEG	51
162	TELLABS	329	12521	69	37	37	13.4	44	0.0	1204	264	1183	30.4	34
163	HALLIBURTON	332	12492	48	23	23	4.8	25	1.1	8819	454	5603	19.3	36
164	COSTCO	333	12481	58	71	71	5.0	34	0.0	21874	312	5476	14.9	54
165	HBO & CO.	337	12399	58	80	80	13.6	54	0.1	1203	201	1313	25.1	52
166	BOSTON SCIENTIFIC	338	12369	64	19	19	12.5	83	0.0	1872	160	1968	15.1	45
167	FRANKLIN RESOURCES (8)	339	12364	49	51	51	5.8	25	0.4	2194	434	3095	23.3	62
168	UNITED HEALTHCARE	340	12333	64	13	13	2.7	27	0.1	11794	460	7623	10.1	52
169	NABISCO HOLDINGS (8)	341	12326	47	17	17	2.9	29	1.5	8734	431	12127	10.1	44
170	TEXTRON	346	12138	74	25	25	3.8	21	1.5	8333	558	18610	17.7	71
171	BANKERS TRUST	349	12101	124	46	46	2.4	15	3.2	NA	866	140102	16.1	61
172	PG&E	354	12002	32	36	36	1.5	19	3.8	15400	716	30557	7.9	12
173	UNION PACIFIC	355	11963	48	-29	-29	1.5	23	1.7	11079	432	28764	6.2	57
174	RALSTON PURINA GROUP	356	11928	111	35	35	12.4	27	1.1	4904	383	4742	45.9	44
175	NORFOLK SOUTHERN	357	11907	31	-3	-3	2.2	17	2.5	4223	699	17350	12.9	57
176	CLEAR CHANNEL COMMUNICATIONS (8)	359	11884	96	81	81	5.1	141	0.0	697	64	3456	3.6	51
177	COX COMMUNICATIONS (8)	360	11851	44	100	100	5.0	-59	0.0	1610	-137	6557	NEG	51
178	LIBERTY MEDIA	362	11808	33	127	127	5.1	29	0.0	374	125	3059b	17.9d	51
179	APPLIED MATERIALS	364	11721	32	-2	-2	4.0	28	0.0	4074	498	5071	14.2	35
180	ALUMINUM CO. OF AMERICA	366	11682	69	-6	-6	2.7	14	2.2	13319	805	13071	19.2	24
181	FIFTH THIRD BANCORP (8)	370	11482	49	43	43	4.9	28	1.4	1918	401	21375	17.8	61
182	ALBERTSON'S	373	11383	46	38	38	4.7	21	1.5	14690c	517c	5219c	22.0	54
183	AETNA	374	11374	78	-23	-23	1.1	19	1.0	12592	793	96001	6.0	52
184	HEALTHSOUTH	375	11368	28	25	25	3.6	28	0.0	3017	342	5401	12.9	54
185	GOODYEAR TIRE & RUBBER	378	11302	72	23	23	3.3	18	1.7	13155	559	9917	18.2	37
186	REPUBLIC INDUSTRIES	381	11224	25	3	3	3.1	43	0.0	10306	200	10527	7.2	54
187	WM. WRIGLEY JR. (8)	384	11156	96	62	62	10.8	39	1.3	1937	272	1343	27.5	44
188	MATTEL	385	11117	38	27	27	6.1	39	0.8	4835	290	3804	15.7	40
189	STATE STREET	387	11115	69	54	54	5.6	28	0.7	NA	380	37975	20.1	6
190	KROGER	392	10994	43	66	66	-14.0	24	0.0	26567	444	6301	NA	54
191	FEDERATED DEPARTMENT STORES	396	10912	52	40	40	2.3	19	0.0	15668c	575c	14264	12.2d	54
192	ROCKWELL INTERNATIONAL	399	10808	55	-2	-2	2.4	24	1.9	7762	586	7971	9.9	35
193	ARCHER DANIELS MIDLAND	400	10805	19	-1	-1	1.8	23	1.1	13853	377	11354	7.7	44
194	AON	401	10804	64	31	31	3.8	37	1.8	5214	299	18691b	10.1d	63
195	TENET HEALTHCARE	402	10789	35	27	27	3.3	NM	0.0	8691	-73	11705	0.3	51
196	AVON PRODUCTS	403	10778	82	28	28	37.8	31	1.7	5079	339	2273	122.6	4
197	GENERAL MILLS	404	10756	68	8	8	22.1	22	3.1	5892	475	3902	101.2	4
198	EDISON INTERNATIONAL	408	10640	29	26	26	2.0	16	3.5	9235	700	25101	12.2	1
199	FPL GROUP	409	10603	61	32	32	2.2	17	3.3	6369	618	12449	12.9	1
200	HONEYWELL	410	10588	84	15	15	4.4	22	1.3	8028	471	6411	20.4	3
201	FORT JAMES	413	10580	48	36	36	43.2	112	1.3	7259	105	7733	38.7	4
202	SERVICE CORP. INTERNATIONAL	417	10464	41	16	16	3.8	26	0.9	2648	375	10307	14.8	5
203	CSX	418	10462	48	-10	-10	1.8	12	2.5	10621	896	19957	14.9	5
204	LOEWS	421	10436	91	-7	-7	1.1	11	1.1	19648	916	69577	9.6	7
205	ST. PAUL	422	10410	44	24	24	1.6	10	2.3	4616	773	21501	16.4	6
206	COMERICA	424	10297	66	58	58	4.1	29	2.0	NA	530	36292	14.4	6
207	USA WASTE SERVICES (8)	427	10276	47	30	30	3.9	31	0.0	2614	273	6623	12.8	5
208	USX-MARATHON GROUP	432	10122	35	17	17	2.8	28	2.4	15754	456	10565	9.8	1
209	WEYERHAEUSER	433	10110	51	2	2	2.2	26	3.2	11210	342	13075	8.3	2
210	CONSOLIDATED EDISON	434	10082	43	47	47	1.8	15	5.0	7121	713	14723b	12.1d	1
211	PROGRESSIVE (8	437	9982	138	74	74	4.3	22	0.2	4598	400	7560	19.3	6
212	PEOPLESOFT	438	9902	44	69	69	23.4	78	0.0	816	108	898	30.0	5

In a world bent on
miracle cures, we now
offer an ultra-high
capacity Private Line
ervice that heals itself
ithin 100 milliseconds.

Perhaps MCI's new SONET Private Line service can't prevent hair loss, but it can help with your bandwidth needs. Because the product is based on SONET self-healing ring technology, it can fully restore itself within 0.1 seconds. And not only does it transmit data 100 times faster than a standard T-1, but it also provides more service coverage (2,200 city pairs) than any other carrier. While the others are only talking about it, we're delivering. When considering availability, quality and capacity, nothing comes close. In fact, this may be the best remedy on the market without FDA approval. To further learn how MCI can manage your bandwidth needs, visit www.mci.com.

data

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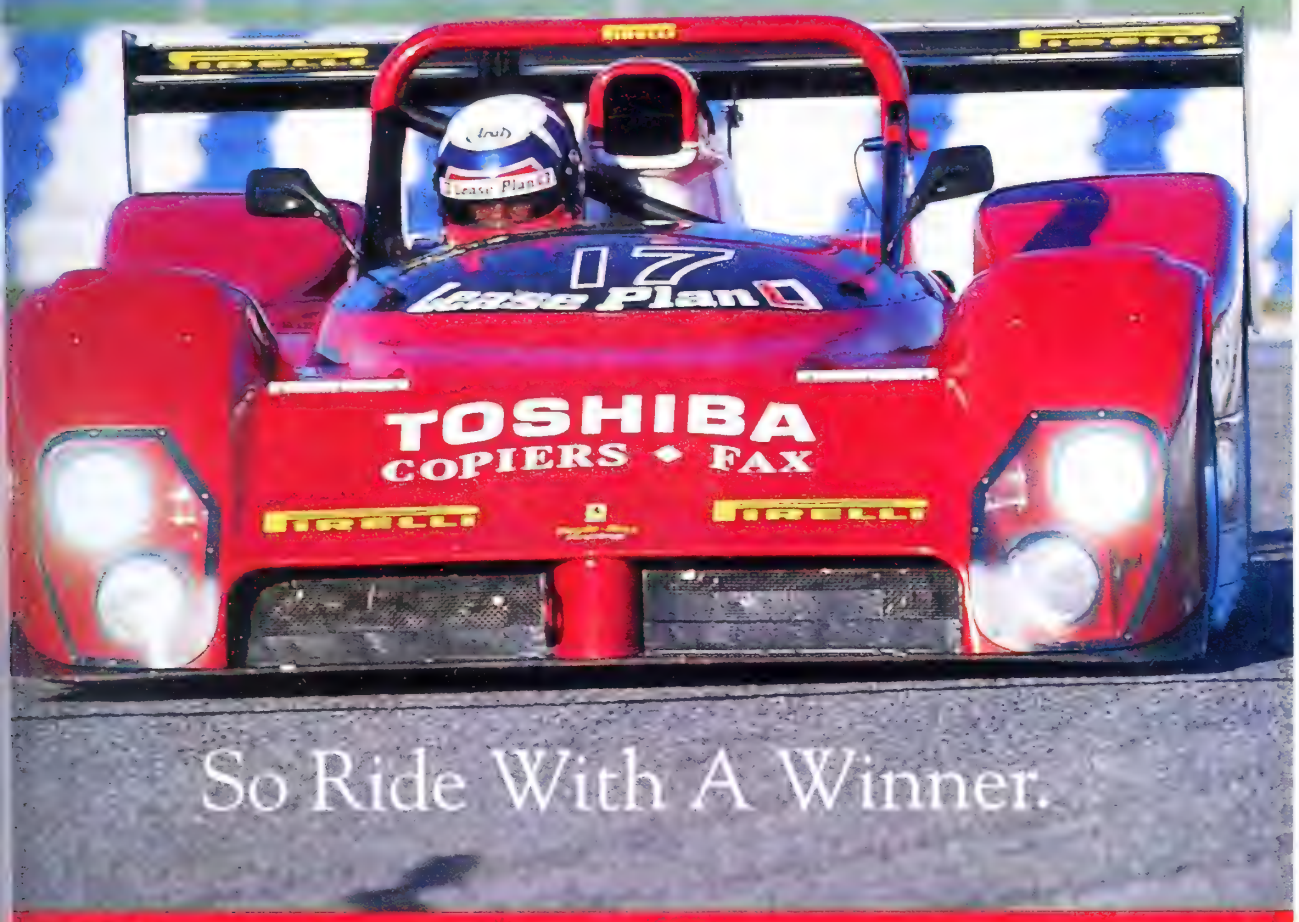
THE BUSINESS WEEK GLOBAL 1000

COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S. $	% CHANGE FROM 1997 (U.S. $)	% CHANGE FROM 1997 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S. $ MIL	ASSETS U.S. $ MIL	RETURN ON EQUITY %	INDUSTRY CODE
213	HERSHEY FOODS	439	9895	69	23	23	11.6	30	1.3	4302	336	3291	39.0	44
214	CARDINAL HEALTH (8	441	9863	89	53	53	6.4	41	0.1	10968	185	3092	15.6	54
215	TELEPORT COMMUNICATIONS GROUP (8)	449	9776	56	85	85	9.5	–40	0.0	494	–223	2456	NEG	55
216	GUIDANT	452	9718	64	66	66	16.7	46	0.1	1328	150	1225	36.3	45
217	TEXAS UTILITIES	453	9690	40	15	15	1.4	14	5.6	7946	660	24874	10.2	12
218	OCCIDENTAL PETROLEUM	454	9641	28	19	19	3.0	15	3.6	8016	691	15282	20.6	11
219	MASCO	458	9562	56	45	45	4.2	22	1.5	3760	382	4334	18.8	21
220	SUNAMERICA	461	9499	49	54	54	4.1	22	0.8	NA	379	35637	18.5	62
221	KMART	462	9497	19	38	38	1.7	26	0.0	32183c	330c	13558c	6.7	54
222	BMC SOFTWARE	464	9468	46	70	70	16.9	62	0.0	563	171	844	27.1	52
223	FDX	466	9435	64	22	22	2.7	39	0.0	14256	151	9278	6.8	52
224	BB&T (8	467	9377	66	65	65	3.8	24	1.9	2518	360	29178	16.0	61
225	CNA FINANCIAL	468	9347	151	48	48	1.1	9	0.0	13362	996	61269	12.2	63
226	AIR PRODUCTS & CHEMICALS	470	9319	87	12	12	3.6	19	1.6	4638	429	7244	NA	22
227	RITE AID	473	9251	36	54	54	3.5	28	1.2	11375c	316c	6417	12.4d	54
228	RJR NABISCO HOLDINGS	475	9154	28	–13	–13	1.0	28	7.3	17057	402	30678	3.6	43
229	CORNING	476	9153	39	–22	–22	7.3	21	1.8	4090	440	4811	35.6	35
230	LINCOLN NATIONAL	480	9028	90	48	48	1.8	19	2.3	1329	441	77175	9.6	63
231	3COM	481	9024	25	–48	–48	4.4	127	0.0	5604	598	3238	3.5d	33
232	MARRIOTT INTERNATIONAL	488	8884	35	NA	NA	3.4	26	0.6	9046	324	5557	13.1	53
233	CHARLES SCHWAB	489	8859	33	23	23	7.7	32	0.5	NA	270	16482	23.9	62
234	SUMMIT BANCORPORATION (8)	490	8852	50	52	52	3.4	21	2.2	2280	371	29964	16.1	61
235	STARWOOD HOTELS & RESORTS TRUST	491	8830	47	27	27	2.1	52	4.4	934	42	3009	4.0	53
236	DELTA AIR LINES	495	8711	115	23	23	2.8	9	0.2	13590	854	12741	30.5	58
237	BECTON, DICKINSON	496	8709	71	44	44	6.5	29	0.8	2811	300	3080	22.3	45
238	CONSECO (8)	497	8709	47	17	17	2.3	14	1.1	5568	574	35915	16.2	63
239	CLOROX	498	8687	84	32	32	8.3	32	1.5	2533	249	2778	26.4	44
240	COGNIZANT	499	8672	53	44	44	10.8	28	0.2	1418	302	1580	38.6	52
241	AMERICAN ELECTRIC POWER	502	8641	45	12	12	1.9	14	5.3	6161	620	16615b	13.0d	12
242	GENENTECH	503	8636	69	18	18	4.2	62	0.0	1017	129	2508	6.9	45
243	UNOCAL	507	8569	36	–17	–17	3.6	18	2.3	6064	669	7530	20.3	1
244	AFLAC	508	8550	64	25	25	2.5	22	0.8	5874	374	29454	11.4	63
245	LEHMAN BROTHERS HOLDINGS	513	8409	71	73	73	2.1	14	0.4	NA	647	151705	14.6	62
246	H. F. AHMANSON	515	8367	76	87	87	1.7	18	1.2	NA	414	46678	9.3	6
247	DOVER	516	8362	38	31	31	5.7	20	1.0	4548	405	2993b	28.3d	7
248	AMP	517	8338	38	–7	–7	2.8	18	2.8	5745	458	4848	15.6	35
249	ASCEND COMMUNICATIONS	518	8329	43	–23	–23	8.5	88	0.0	1167	–124	1138	9.7	3
250	AES (8	519	8314	48	33	33	5.6	38	0.0	1411	188	8909	14.6	1
251	PARAMETRIC TECHNOLOGY	520	8294	31	37	37	12.1	32	0.0	809	219	832	38.0	5
252	COMPUWARE (8	521	8232	46	98	98	11.6	42	0.0	813	97	755	27.8	5
253	DRESSER INDUSTRIES	527	8171	47	36	36	4.7	23	1.6	7419	318	5099	20.7	3
254	TRIBUNE	528	8165	67	55	55	5.4	22	1.0	2720	394	4778	24.6	5
255	PANAMSAT (8	529	8147	55	91	91	3.1	64	0.0	630	133	5682	4.9	3
256	HOUSTON INDUSTRIES	530	8131	29	38	38	1.7	17	5.2	4251	421	18415	10.4	1
257	DIGITAL EQUIPMENT†	531	8127	55	54	54	2.4	17	0.0	13047	141	9693	14.2	3
258	COMPUTER SCIENCES	533	8097	52	34	34	4.8	29	0.0	6661c	274c	3581	16.2d	5
259	INTERPUBLIC GROUP	534	8089	59	49	49	7.0	30	1.0	3126	239	5703	23.8	5
260	QUAKER OATS	542	7993	58	40	40	38.7	–9	2.0	5016	–931	2697	NEG	4
261	OMNICOM GROUP (8)	543	7969	47	61	61	7.8	32	1.1	3125	222	4966	24.2	5
262	SYSCO	545	7870	23	34	34	5.7	25	1.5	14455	303	3437	23.1	5
263	NORTHERN TRUST (8)	547	7866	71	44	44	4.7	25	1.2	2022	309	25315	19.0	6
264	PRAXAIR	550	7782	49	–6	–6	3.7	18	1.0	4735	422	7810	19.8	2
265	McGRAW-HILL	551	7780	78	43	43	5.4	26	2.0	3534	291	3724	20.7	5
266	COOPER INDUSTRIES	552	7772	64	26	26	3.0	19	2.1	5289	395	6053	16.0	3
267	DOMINION RESOURCES	553	7764	40	15	15	1.4	20	6.5	7436	399	14906b	7.0d	1
268	HILTON HOTELS	554	7759	31	11	11	2.3	32	1.0	5316	250	7826	7.3	5
269	NEWELL	559	7688	48	26	26	4.5	19	1.5	3234	290	3944	23.5	4
270	PUBLIC SERVICE ENTERPRISE GROUP	560	7684	33	34	34	1.5	13	6.5	6370	560	17943	11.8	1
271	UNUM	561	7682	56	40	40	3.2	20	1.1	3120b	238b	13200	15.8	6
272	ESTEE LAUDER (8)	567	7557	64	23	23	11.2	37	0.5	3382	198	1873	30.6	4
273	LIMITED	568	7554	33	65	65	4.4	26	1.6	9189c	341c	4301c	17.1	5
274	PIONEER HI-BRED INTERNATIONAL	570	7509	38	64	64	8.2	41	0.9	1784	243	1603	19.8	2
275	[illegible]	572	7503	48	77	77	7.6	44	0.0	3060	141	1620	15.7	5
276	COASTAL	573	7489	71	41	41	2.3	19	0.6	9653	392	11625	12.1	1
277	[illegible]	576	7466	47	95	95	7.6	23	0.5	7389c	307c	2561	32.6d	5
278	BURLINGTON RESOURCES	577	7460	42	–9	–9	2.5	32	1.3	2000	319	5821	7.8	1
279	ING [illegible]RAND	578	7458	45	24	24	3.2	18	1.3	7103	381	8416	17.3	3
280	UNICO[illegible]	579	7456	34	51	51	1.2	–30	4.7	7083	445	23388b	NEG	5
281	TOYS 'R' US	582	7395	27	–15	–15	1.8	16	0.0	11038c	490c	8023	11.6d	5
282	LEVEL 3 COM[illegible]CATIONS (8	583	7369	50	NA	NA	3.6	105	0.0	332	83	2779	3.4	
283	TCI VENTURES GROUP	584	7354	17	NA	NA	2.9	–28	0.0	969	–601	3864	NEG	
284	BENEFICIAL	585	7330	134	109	109	4.3	31	1.7	NA	254	17645	14.0	6

You're In Business To Outrun Competition...



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Business Intelligence

Has it crossed the chasm?

Over the past several years, an innovative business approach has gained an increasingly high profile. Business intelligence gives companies the ability to extract greater value from corporate information to enable everyone across the enterprise to make better decisions that directly impact the bottom line. Leading organizations worldwide are already achieving significant competitive advantage with business intelligence. But has it reached a critical mass? Is it moving beyond being the "invisible" advantage of Fortune 1000 companies to become an essential component of mainstream business success?

Passing the Mainstream Test

To answer these questions, consider what mainstream decision makers demand from a business approach. First, a record of proven, bottom-line results. Second, mature products and professional services to address the complete range of enterprise needs. Third, the security of dealing with an established market leader offering best-of-breed products and global support. And fourth, fast and easy deployment using an organization's existing IT infrastructure — often this is the single most important determinant of whether a technology achieves mainstream acceptance.

As the worldwide business intelligence market leader, Cognos Corporation of Burlington, Mass., is uniquely positioned to address all of these criteria. Through developing products that solve customers' specific business problems, Cognos has discovered effective ways to use business intelligence in every department of every enterprise, and in every industry. Today, organizations like Domino's Pizza, Ford, Johnson & Johnson and the National Association of Security Dealers (NASD) are cutting costs, increasing efficiency and enabling new strategic capabilities by adopting Cognos' award-winning business intelligence software. This market leadership is evident in Cognos' strategic technology partnerships with other industry leaders such as IBM, Microsoft, PeopleSoft, Oracle and SAP. And Cognos business intelligence software deploys easily and quickly across the enterprise, typically delivering return on investment within 30 to 90 days.

Setting the Agenda

The cornerstone of Cognos' success has been enduring customer relationships. As technologies and business needs have evolved, Cognos has responded with new products that extend business intelligence capabilities. Thanks to these pioneering efforts, a paradigm shift has occurred within many leading-edge companies: managers now *expect* to be able to easily access corporate data and it from any angle, in any combina They *expect* that creating reports not be complex or time consur They *expect* to be able to automat ly uncover hidden factors impa their business. In other words, ness intelligence has become int to how they achieve and sustain petitive advantage.

> *< Organizations like Domino's Pizza, Ford, Johnson & Johnson and the National Association of Security Dealers (NASD) are cutting costs, increasing efficiency and enabling new strategic capabilities by adopting Cognos' award-winning business intelligence software. >*

The Power of the Web

As business intelligence enters mainstream, Cognos has devel products that leverage the W Wide Web, which has emerge a mainstream computing plat Through the Web, business in gence capabilities can be distril to an entire organization. As a r every department a broader perspe of their impact o organization, an impact of other d ments on theirs. can plan better coordinate the of information a the organization. can better align d mental goals long-range corp goals. The res better decisions, every day — by e one in the organization.

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THE BUSINESS WEEK GLOBAL 1000

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285	CADENCE DESIGN SYSTEMS (8)	586	7320	35	112	112	9.8	59	0.0	916	182	1024	16.5	52
286	MBIA	589	7279	75	39	39	2.2	18	1.1	297	374	9811	12.5	63
287	ALLTEL	590	7269	39	20	20	3.3	14	2.9	3264	508	5633	24.2	55
288	NORTHROP GRUMMAN	591	7255	107	27	27	2.7	23	1.5	9153	407	9677	11.9	31
289	INTIMATE BRANDS (8)	592	7246	29	35	35	12.9	25	2.0	3618	289	1348	52.7	54
290	TRANSAMERICA	595	7238	115	27	27	1.5	13	1.7	NA	532	51173	11.7	62
291	McKESSON	596	7232	78	108	108	5.6	47	0.6	12887	115	5173	11.9	45
292	HARTFORD LIFE (8)	597	7209	52	54	54	3.4	22	0.7	4699	306	100980	15.5	63
293	US AIRWAYS GROUP	601	7062	70	101	101	8.8	6	0.0	8514	1025	8372	141.9	56
294	TENNECO	602	7061	42	-7	-7	2.8	20	2.9	7220	361	8332	14.2	71
295	STAPLES	603	7057	25	71	71	6.6	44	0.0	5181c	131c	2455c	14.9	54
296	GATEWAY 2000	607	7012	45	35	35	7.5	59	0.0	6294	110	2039	12.6	33
297	CINCINNATI FINANCIAL (8)	608	7004	42	61	61	1.4	22	1.5	1942	299	9493	6.2	62
298	REPUBLIC NEW YORK	612	6949	128	29	29	2.4	16	1.6	NA	449	55638	15.2	61
299	EQUITY OFFICE PROPERTIES TRUST	613	6933	28	NA	NA	1.3	NA	4.7	508b	73b	11752	NA	64
300	QWEST COMMUNICATIONS INTERNATIONAL (8)	615	6867	33	NA	NA	16.9	551	0.0	697	15	1398	3.1	34
301	PACIFICORP	616	6855	23	16	16	1.6	43	4.7	6278	301	13880	3.7	12
302	MGIC INVESTMENT (8)	617	6842	60	35	35	4.3	20	0.2	871	324	2618	21.4	62
303	SLM HOLDING	618	6840	40	15	15	10.2	13	1.4	NA	511	39909	77.2	62
304	AMERICAN STORES	619	6825	25	10	10	3.0	24	1.4	19139c	281c	8536c	12.1	54
305	MERCANTILE BANCORPORATION	620	6811	51	30	30	2.8	13	2.4	NA	337	29955	21.4	61
306	UNION CARBIDE	623	6801	50	7	7	2.9	10	1.8	6502	676	6964	28.5	22
307	NEW YORK TIMES	625	6726	71	53	53	3.9	25	1.1	2866	262	3639	16.0	51
308	ROHM & HAAS	629	6665	110	27	27	3.7	17	1.8	3999	394	3900	21.5	22
309	DIAMOND OFFSHORE DRILLING (8)	630	6662	48	34	34	4.2	22	1.0	956	279	2299	19.0	36
310	FORTUNE BRANDS	632	6648	38	23	23	1.8	110	2.2	4845	42	9504b	1.6d	46
311	FIRSTENERGY	637	6604	30	40	40	1.6	15	5.1	2821	306	18081	10.6	12
312	FRED MEYER (8)	640	6577	43	87	87	4.9	28	0.0	5481	103	4431	17.4	54
313	TRW	642	6569	54	0	0	4.0	13	2.3	10831	499	6410	31.2	37
314	SAFECO	643	6565	47	7	7	1.2	14	3.0	3107	430	29468	8.4	63
315	BROWNING-FERRIS INDUSTRIES	644	6549	36	7	7	2.7	19	2.1	5783	332	6678	14.4	52
316	CAPITAL ONE FINANCIAL (8)	646	6534	100	211	211	6.6	31	0.3	1787	189	7078	21.4	62
317	SOUTHTRUST (8)	649	6508	41	57	57	2.6	19	1.9	2414	307	30906	13.7	6
318	VF	653	6494	53	37	37	3.5	19	1.5	5222	351	3323	18.5	4
319	ENTERGY	654	6483	26	0	0	1.0	13	6.8	9562	595	27001	7.3	1
320	CROWN CORK & SEAL	655	6455	52	-11	-11	2.2	21	1.9	8494	350	12306	10.7	2
321	CRESTAR FINANCIAL (8)	656	6429	57	51	51	3.0	20	2.3	1776	310	24929	15.3	6
322	EATON	658	6413	90	13	13	3.2	17	2.0	7563	395	5465	19.1	3
323	R. R. DONNELLEY & SONS	660	6385	45	21	21	4.1	25	1.8	4850	249	4134	16.2	5
324	EXEL	661	6371	75	70	70	2.6	9	2.1	541	677	6088	28.8	6
325	OWENS-ILLINOIS	664	6326	45	46	46	4.8	21	0.0	4659	272	6845	23.0	2
326	HUNTINGTON BANCSHARES (8)	666	6298	33	27	27	3.0	20	2.4	2246	293	26731	15.3	6
327	PECO ENERGY	667	6287	28	49	49	2.3	19	3.5	4618	337	12355	11.8	1
328	CAROLINA POWER & LIGHT	673	6205	41	18	18	2.3	15	4.7	3024	388	8369b	15.2d	1
329	SERVICEMASTER (8)	675	6188	33	51	51	11.3	20	1.5	3962	329	2475	57.6	5
330	GOLDEN WEST FINANCIAL	676	6186	108	59	59	2.3	16	0.5	NA	354	39590	13.9	6
331	UNISYS	677	6175	25	257	257	-68.2	-5	0.0	6636	-854	5591	NA	3
332	REGIONS FINANCIAL (8)	679	6160	41	38	38	2.9	18	2.2	1880	300	23034	15.9	6
333	BAY NETWORKS	682	6143	28	12	12	4.7	22	0.0	2093	119	1766	21.2	3
334	BEAR STEARNS	683	6136	54	67	67	2.3	12	1.1	NA	613	121434	18.7	6
335	BAKER HUGHES	687	6110	36	-4	-4	2.3	17	1.3	3685	278	4756	13.4	3
336	JEFFERSON-PILOT	691	6084	57	35	35	2.2	16	2.1	1135	396	23131	13.7	6
337	GENUINE PARTS	693	6074	34	1	1	3.3	18	3.0	6005	342	2754	18.6	5
338	WINN-DIXIE STORES	695	6044	41	6	6	4.5	28	2.5	13219	204	2921	16.3	5
339	PROVIDIAN FINANCIAL (8)	696	6038	64	NA	NA	9.4	30	0.3	1216	191	4449	31.9	6
340	INGRAM MICRO (8)	697	6027	44	85	85	5.4	29	0.0	16582	194	4932	18.9	5
341	TORCHMARK	698	6013	43	30	30	3.1	17	1.4	1678	338	10967	18.2	6
342	PAINEWEBBER GROUP	700	5986	43	81	81	3.1	15	1.0	NA	415	57065	21.2	6
343	SOUTHWEST AIRLINES	701	5955	27	55	55	2.9	17	0.2	3817	318	4246	16.9	5
344	NEXTEL COMMUNICATIONS	702	5953	24	60	60	2.1	-3	0.0	739	-1568	6472b	NEG	5
345	CHANCELLOR MEDIA (8)	703	5945	42	115	115	3.0	-48	0.0	582	-27	4961	NEG	6
346	SYNOVUS FINANCIAL (8)	705	5901	22	31	31	6.4	34	1.3	1149	165	9260	18.7	6
347	GEORGIA-PACIFIC GROUP	707	5893	64	2	2	1.7	-102	1.6	12968	-86	11779	NEG	3
348	PAYCHEX (8)	709	5872	36	47	47	18.9	62	0.7	735	75	1201	30.4	6
349	STAR BANC (8)	711	5830	61	48	48	4.1	26	1.5	975	195	10959	16.1	6
350	ACE (8	714	5795	36	68	68	2.1	10	0.9	1011	461	5002	21.3	6
351	DUN & B[illegible]DSTREET	715	5794	34	29	29	-13.4	18	2.6	2154	311	2294b	NA	6
352	SHERWIN-[illegible]LIAMS	717	5769	33	11	11	3.6	22	1.4	4881	261	4036	16.5	6
353	DTE ENERGY	718	5740	40	49	49	1.6	12	5.2	3764	417	11223	13.0	1
354	TIMES MIRROR	725	5679	64	14	14	6.7	26	1.1	3319	250	3530b	25.5d	6
355	SEAGATE TECHNOLOGY	728	5651	23	-43	-43	1.6	-10	0.0	8940	658	6723	NEG	3
356	ROYAL CARIBBEAN CRUISES (8)	731	5638	70	100	100	3.1	25	0.9	1939	183	5340	12.4	6

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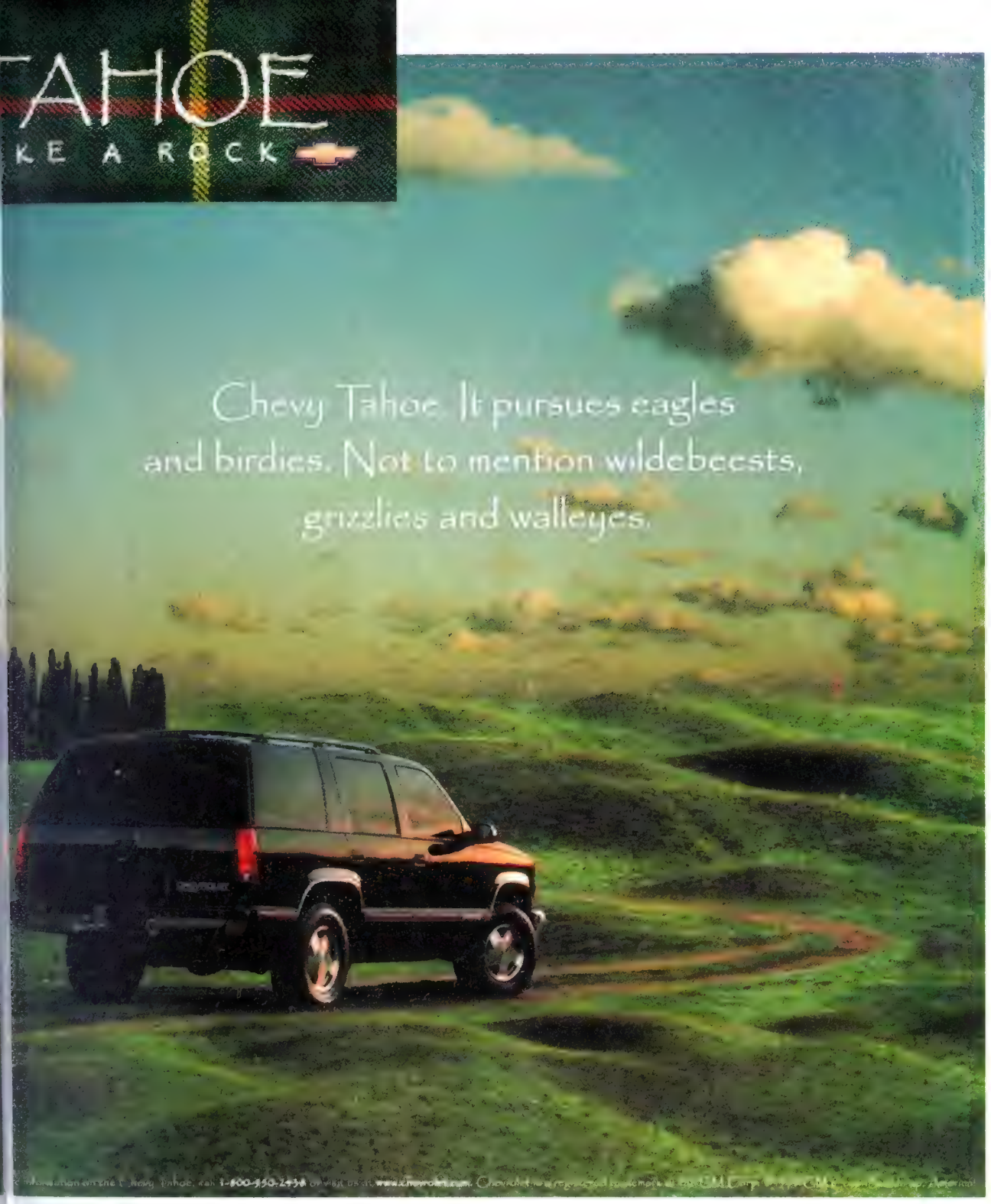
THE BUSINESS WEEK GLOBAL 1000

COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S.,$	% CHANGE FROM 1997 (U.S. $)	% CHANGE FROM 1997 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S. $ MIL	ASSETS U.S. $ MIL	RETURN ON EQUITY %	INDU CO
357	GENERAL DYNAMICS	736	5616	44	19	19	2.9	17	2.0	4062	316	4091	17.1	
358	CENTRAL & SOUTH WEST	737	5612	26	24	24	1.5	15	6.6	5268	155	13332b	9.5d	
359	THERMO ELECTRON	739	5591	35	2	2	2.8	22	0.0	3558	239	5796	13.0	
360	NATIONWIDE FINANCIAL SERVICES (8)	741	5582	43	55	55	2.5	20	0.6	2255	265	59893	12.9	
361	BLACK & DECKER	747	5545	58	68	68	3.1	24	0.8	4941	227	5361	12.9	
362	DANA	749	5516	52	44	44	3.2	14	2.2	8291	369	7119	22.6	
363	MARSHALL & ILSLEY (8)	750	5483	54	35	35	2.9	20	1.6	1222	245	19478	14.2	
364	WASHINGTON POST	751	5469	542	41	41	4.6	21	0.9	1956	282	2077	22.5	
365	HARLEY-DAVIDSON	756	5444	36	60	60	6.6	31	0.5	1763	174	1599	21.6	
366	ARCO CHEMICAL	757	5421	56	21	21	3.0	35	5.0	3995	111	4116	8.6	
367	CONSOLIDATED NATURAL GAS	758	5419	57	6	6	2.3	19	3.4	5710	311	6314	11.9	
368	GREEN TREE FINANCIAL (8)	760	5399	40	14	14	4.0	20	0.9	1708	301	4867	19.9	
369	DOLLAR GENERAL (8)	763	5371	38	77	77	9.0	36	0.4	2627	145	915	24.8	
370	AMEREN	764	5369	39	7	7	1.8	14	6.5	3327	387	8828	12.6	
371	UNIONBANCAL (8)	765	5364	98	47	47	2.1	14	1.7	2338	387	30585	14.9	
372	NORDSTROM	767	5355	72	50	50	3.7	30	0.8	4852c	186c	2865c	12.5	
373	LINEAR TECHNOLOGY (8)	768	5350	70	40	40	7.7	32	0.3	379	134	680	24.0	
374	FIRSTAR (8)	773	5324	37	23	23	3.1	18	2.5	1842	295	19844	17.0	
375	EASTMAN CHEMICAL	775	5301	67	13	13	3.0	18	2.6	4678	286	5778	16.4	
376	AVERY DENNISON	779	5281	52	38	38	6.3	25	1.6	3346	205	2047	25.2	
377	CIENA (8)	788	5215	52	11	11	11.4	43	0.0	374	113	447	26.8	
378	FRONTIER (8)	791	5201	30	66	66	5.4	50	2.9	2353	55	2475	10.9	
379	INTERNATIONAL FLAVORS & FRAGRANCES	795	5173	48	8	8	5.2	24	3.1	1427	218	1422	21.8	
380	HUMANA	797	5170	31	37	37	3.4	28	0.0	7880	173	5418	12.2	
381	WHIRLPOOL	798	5161	68	37	37	2.9	19	2.0	8617	238	8270	15.0	
382	W. W. GRAINGER	799	5159	106	32	32	4.0	22	1.0	4137	232	1998	17.9	
383	DONALDSON, LUFKIN & JENRETTE (8)	800	5152	44	67	67	2.5	11	0.6	7500	408	70506	22.8	
384	CIT GROUP (8)	801	5140	32	NA	NA	2.1	16	0.3	2073	310	20464	12.8	
385	EQUIFAX (8)	802	5139	36	16	16	15.8	27	1.0	1366	186	1177	58.0	
386	NEW CENTURY ENERGIES	807	5106	46	14	14	2.2	18	5.0	3343	261	7310	11.9	
387	CINERGY	808	5098	32	-8	-8	2.0	14	5.6	4353	363	8858	13.9	
388	LORAL SPACE & COMMUNICATIONS (8)	809	5097	25	52	52	4.1	423	0.0	1313	40	3005	NEG	
389	UNION PACIFIC RESOURCES GROUP	810	5084	20	-30	-30	3.3	20	1.0	1925	333	3649b	16.3d	
390	HASBRO	812	5082	38	32	32	2.8	42	0.8	3189	135	2900	6.6	
391	AUTOZONE	814	5073	33	42	42	4.7	24	0.0	2691	195	1884	19.4	
392	JOHNSON CONTROLS	816	5034	60	40	40	3.2	16	1.6	11145	261	6049	20.2	
393	COUNTRYWIDE CREDIT INDUSTRIES	818	5020	46	72	72	3.0	14	0.7	NA	345c	8089	21.1d	
394	MICRON TECHNOLOGY	819	5013	24	-44	-44	1.7	262	0.0	3516	225	4851	0.7	
395	PROVIDENT (8)	824	4991	37	37	37	1.6	19	1.1	3553	247	23178	8.3	
396	HERTZ (8)	828	4967	46	34	34	4.4	23	0.4	3891	202	7436	19.2	
397	TOSCO (8)	829	4964	32	-3	-3	2.5	20	0.8	13282	213	5975	12.8	
398	UST	831	4942	27	-7	-7	11.2	11	6.1	1375	439	827	103.0	
399	AMERADA HESS	832	4941	54	1	1	1.5	-98	1.1	8340	24	7784b	NEG	
400	LEGGETT & PLATT (8)	833	4930	50	33	33	3.8	26	1.3	2909	208	2106	14.9	
401	YAHOO! (8)	834	4929	110	409	409	38.9	-242	0.0	67	-23	142	NEG	
402	TRANSOCEAN OFFSHORE (8)	835	4927	49	43	43	3.0	26	0.2	892	142	2755	11.8	
403	GPU	836	4923	39	10	10	1.5	15	5.2	4143	335	12925	10.0	
404	UNION PLANTERS (8)	838	4906	59	24	24	2.8	22	3.4	1652	209	18105	12.6	
405	TYSON FOODS (8)	840	4893	21	3	3	2.4	29	0.5	6356	186	4411	8.4	
406	RUBBERMAID	841	4887	33	17	17	4.7	45	2.0	2400	133	1924	10.3	
407	HEALTH MANAGEMENT ASSOCIATES (8)	843	4879	30	53	53	8.3	41	0.0	895	108	728	20.3	
408	EQUITY RESIDENTIAL PROPERTIES TRUST	854	4782	49	4	4	2.1	29	5.5	NA	177	7095b	7.4d	
409	SOLECTRON (8)	856	4758	41	32	32	4.6	26	0.0	3694	158	1852	17.5	
410	MAYTAG	857	4745	50	89	89	7.8	22	1.3	3408	183	2514	35.1	
411	WESTERN ATLAS	858	4744	87	61	61	5.3	50	0.0	1658	92	2331	10.6	
412	TRICON GLOBAL RESTAURANTS (8)	859	4721	31	NA	NA	-2.9	-43	0.0	9681	-111	5098	NM	
413	R&B FALCON (8)	860	4714	29	13	13	5.7	26	0.0	942	156	1928	22.0	
414	POPULAR (8)	864	4698	69	88	88	3.2	23	1.3	1684	210	19301	14.3	
415	OFFICE DEPOT	865	4695	30	71	71	3.5	25	0.0	6718	168	2981	13.8	
416	COLUMBIA ENERGY GROUP	867	4685	84	31	31	2.6	18	1.4	5036	273	6612	14.4	
417	DOW JONES	870	4675	48	24	24	6.0	-6	2.0	2573	-802	1920	NEG	
418	EL PASO NATURAL GAS (8)	872	4655	39	30	30	2.3	23	2.0	5638	211	9532	10.2	
419	CHAMPION INTERNATIONAL	877	4617	48	-3	-3	1.4	76	0.4	5736	4	9111	1.9	
420	ROBERT HALF INTERNATIONAL (8)	878	4617	51	77	77	11.0	45	0.0	1303	94	561	24.4	
421	H&R BLOCK	880	4612	44	33	33	4.6	133	1.8	1930	48	1906	3.4	
422	SABRE GROUP HOLDINGS (8)	882	4585	35	26	26	6.1	22	0.0	1784	200	1524	27.1	
423	KANSAS CITY SOUTHERN INDUSTRIES (8)	883	4580	42	132	132	6.6	NM	0.4	1058	-14	2434	0.5	
424	UAL	884	4578	79	2	2	2.0	6	0.0	17378	958	15803	34.7	
425	STEELCASE (8)	885	4572	30	NA	NA	3.1	21	0.3	2408	28	1922	14.6	
426	ALLEGHENY TELEDYNE	886	4572	23	-10	-10	4.1	14	2.8	3745	298	2605	29.1	
427	WELLPOINT HEALTH NETWORKS (8)	890	4554	65	36	36	3.5	19	0.0	5826	227	4533	18.2	
428	FOOD LION (8)	893	4545	10	45	45	3.3	24	1.5	10194	172	3459	13.7	



The Chevy® Tahoe is certainly right at home at the country club. But it's equally comfortable racing across the plains, exploring the backwoods or just being parked next to a placid fishing hole. It's big, powerful and willing to go just about anywhere you want to take it. Nothing against foursomes, but sometimes it's just more fun to strike out on your own. Chevy Tahoe.

THE BUSINESS WEEK GLOBAL 1000

COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL.	PRICE PER SHARE U.S. $	% CHANGE FROM 1997 (U.S. $)	% CHANGE FROM 1997 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL.	PROFITS U.S $ MIL	ASSETS U.S. $ MIL.	RETURN ON EQUITY %	IND C
429	PARKER HANNIFIN	894	4540	41	17	17	3.0	14	1.5	4091	274	2999	21.2	
430	NUCOR	895	4535	52	–13	–13	2.4	15	0.9	4185	294	2984	15.7	
431	DILLARD'S	896	4528	42	25	25	1.8	18	0.4	6632c	258c	5060	9.7d	
432	BALTIMORE GAS & ELECTRIC	899	4501	30	16	16	1.6	13	5.5	3308	283	8773	11.7	
433	STORAGE TECHNOLOGY	900	4500	84	106	106	4.0	21	0.0	2145	232	1740	19.1	
434	TANDY	902	4481	44	64	64	4.7	24	0.9	5372	187	2318	19.4	
435	CINTAS (8)	903	4481	46	47	47	7.8	42	0.4	840	91	762	18.6	
436	KNIGHT-RIDDER	904	4473	57	32	32	3.6	12	1.4	2877	397	4355	29.6	
437	SEALED AIR	905	4455	54	17	17	8.9	28	0.0	843	80	498	31.1	
438	NORTHWEST AIRLINES	910	4423	45	9	9	47.4	7	0.0	10226	606	8512b	633.7d	
439	CMS ENERGY	912	4415	44	30	30	2.4	17	2.8	4787	268	9793b	14.0d	
440	CHARTER ONE FINANCIAL (8)	919	4389	34	53	53	3.1	23	1.6	1492	151	19760	13.4	
441	AMSOUTH BANCORPORATION (8)	920	4388	38	47	47	3.1	20	2.1	1538	226	18622	15.4	
442	MAXIM INTEGRATED PRODUCTS (8)	921	4377	33	24	24	7.2	27	0.0	434	137	556	26.9	
443	SOUTHERN NEW ENGLAND TELECOMMUNICATIONS	922	4377	64	65	65	7.2	21	2.7	2022	198	2771	35.0	
444	MOLEX (8)	923	4369	28	–11	–11	3.5	24	0.2	1540	167	1637	14.6	
445	ITT INDUSTRIES	924	4368	37	49	49	5.3	36	1.6	8777	114	6221	14.8	
446	VASTAR RESOURCES (8)	927	4354	45	29	29	8.6	19	0.7	3307	241	1925	44.7	
447	NEWMONT GOLD	928	4351	26	–34	–34	2.6	59	0.5	1573	73	3614	4.3	
448	CINCINNATI BELL (8)	930	4342	32	3	3	7.3	27	1.3	1757	194	1499	26.8	
449	CASE	934	4318	58	–2	–2	2.0	11	0.4	5796	403	6981	18.4	
450	SONAT	935	4313	39	–32	–32	2.1	22	2.8	4175	176	4432	9.3	
451	PACCAR (8)	936	4313	55	22	22	2.7	11	3.8	6752	345	5599	24.5	
452	NETWORK ASSOCIATES (8)	939	4283	61	–7	–7	9.2	557	0.0	612	–28	602	1.7	
453	E. W. SCRIPPS (8)	940	4263	53	39	39	4.1	28	1.0	1242	158	2281	14.6	
454	NORTHERN STATES POWER	941	4258	57	16	16	1.8	19	5.0	2734	237	7144	9.6	
455	DANAHER (8)	943	4234	72	49	49	4.4	26	0.1	2051	155	1880	16.8	
456	HILLENBRAND INDUSTRIES (8)	945	4231	62	31	31	4.8	26	1.2	1776	157	3828	18.4	
457	T. ROWE PRICE ASSOCIATES (8)	948	4207	35	44	44	7.9	26	1.0	755	144	646	29.8	
458	STANLEY WORKS	949	4205	47	16	16	5.4	–101	1.7	2670	–42	1660b	NEG	
459	CIRCUIT CITY STORES	952	4184	42	7	7	2.7	34	0.3	7154	137	3008	8.0	
460	HERCULES	953	4182	44	–6	–6	6.1	15	2.5	1866	324	2411	40.5	
461	ALZA	954	4181	48	68	68	13.7	39	0.0	464	108	1369	35.5	
462	REYNOLDS METALS	957	4176	58	–15	–15	1.6	28	2.4	6881	136	7226	5.6	
463	STARBUCKS (8)	959	4147	48	52	52	5.8	57	0.0	967	57	851	10.1	
464	CABLEVISION SYSTEMS (8)	960	4146	55	239	239	–1.9	37	0.0	1949	137	5625	NEG	
465	GALILEO INTERNATIONAL (8)	963	4126	39	NA	NA	6.0	26	0.8	1256	162	1269	23.5	
466	AT HOME (8)	964	4121	35	NA	NA	34.6	–12	0.0	7	–219	161	NEG	
467	CONSOLIDATED STORES (8)	965	4116	38	23	23	3.9	43	0.0	4055	86	1746	8.9	
468	CRESCENT REAL ESTATE EQUITIES	967	4113	34	26	26	1.8	25	4.4	NA	117	4180	7.4	
469	FIRST TENNESSEE NATIONAL (8)	973	4070	32	41	41	4.2	20	2.1	1450	197	14388	20.9	
470	TOTAL SYSTEM SERVICES (8)	978	4050	21	33	33	18.3	82	0.1	362	47	297	22.2	
471	CENTURY TELEPHONE ENTERPRISES (8)	979	4037	44	120	120	3.1	15	0.6	902	256	4709	20.3	
472	ANALOG DEVICES	981	4016	25	–7	–7	3.7	22	0.0	1243	178	1764	16.4	
473	SANTA FE INTERNATIONAL (8)	982	4008	35	NA	NA	4.8	24	0.4	579	165	1000	19.8	
474	FIRST SECURITY (8)	983	4005	23	39	39	2.8	18	2.3	1371	206	17307	15.5	
475	FLORIDA PROGRESS (8)	984	4003	41	40	40	2.3	63	5.2	3316	56	5760	3.6	
476	ECOLAB (8)	986	3973	31	47	47	7.3	29	1.2	1640	134	1416	25.5	
477	BROWN-FORMAN (8)	989	3967	58	13	13	5.1	22	1.9	1584	169	1428	23.7	
478	ANADARKO PETROLEUM	992	3961	66	5	5	3.5	49	0.6	673	107	2992	7.2	
479	OLD REPUBLIC INTERNATIONAL (8)	998	3936	29	42	42	1.8	12	1.2	1963	298	6923	14.4	
480	HOST MARRIOTT	1000	3932	19	9	9	3.3	55	0.0	NA	47	6526	5.9	

KEY TO INDUSTRY CODES Left-hand digit represents broad economic sector as defined by Morgan Stanley Capital International. Right-hand digit is industry classification c within each economic sector.

1 ENERGY
- 11. Energy sources
- 12. Utilities-electrical & gas

2. MATERIALS
- 21. Building materials & components
- 22. Chemicals
- 23. Forest products & paper
- 24. Metals–nonferrous
- 25. Metals–steel
- 26. Misc. materials & commodities

3. CAPITAL EQUIPMENT
- 31. Aerospace & military technology
- 32. Construction & housing
- 33. Data processing & reproduction
- 34. Electrical & electronics
- 35. Electronic components & instruments
- 36. Energy equipment & services
- 37. Industrial components
- 38. Machinery & engineering

4. CONSUMER GOODS
- 41. Appliances & household durables
- 42. Automobiles
- 43. Beverages & tobacco
- 44. Food & household products
- 45. Health & personal care
- 46. Recreation, other consumer goods
- 47. Textiles & apparel

5. SERVICES
- 51. Broadcasting & publishing
- 52. Business & public services
- 53. Leisure & tourism
- 54. Merchandising
- 55. Telecommunications
- 56. Transportation-airlines
- 57. Transportation-road & rail
- 58. Transportation-shipping
- 59. Wholesale & international trade

6. FINANCE
- 61. Banking
- 62. Financial services
- 63. Insurance
- 64. Real estate

7. OTHER
- 71. Multi-industry
- 81. Gold mines

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fig. 1

fig. 2

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The number preceding each company is its Global 1000 rank. The code following each company shows its nationality and rank within that nation. To find the statistics for a company, turn to the country listing and look for the company by its rank.

A

724 [illegible] (GE-34)
NR ABB AB (SWE-3)
NR ABB AG (SWI-9)
126 [illegible] (SWE/SW NR)
159 [illegible] (FR-19)
55 Abbott Laboratories (US-38)
104 [illegible] (NE-6)
443 [illegible]
714 ACE (US-350)
652 Acom (JA-70)
624 [illegible]
540 Adidas-Salomon (GE-26)
685 Advantest (JA-73)
74 Aegon (NE-4)
519 AES (US-250)
374 Aetna (US-183)
508 AFLAC (US-244)
999 AGA (SWE-22)
377 AGF (FR-22)
515 Ahmanson (H F.) (US-246)
291 Air Liquide (L') (FR-18)
470 Air Products & Chemicals (US-226)
143 AirTouch Communications (US-75)
752 Ajinomoto (JA-82)
277 [illegible]
373 Albertson's (US-182)
651 Alcan Aluminium (CA-15)
101 Alcatel (FR-4)
738 Alitalia (IT-21)
776 All Nippon Airways (JA-85)
440 Allearza Assicurazioni (IT-13)
886 Allegheny Teledyne (US-426)
546 Alliance & Leicester (BR-68)
29 Allianz (GE-1)
425 Allied Domecq (BR-54)
376 Allied Irish Banks (IR-1)
165 AlliedSignal (US-84)
86 Allstate (US-55)
590 Alltel (US-287)
598 Almanij (BE-8)
366 Aluminum Co. of America (US-180)
514 Alusuisse-Lonza Group (SWI-13)
954 Alza (US-461)
832 Amerada Hess (US-399)
764 Ameren (US-370)
229 America Online (US-117)
502 American Electric Power (US-241)
70 American Express (US-46)
242 American General (US-124)
45 American Home Products (US-30)
25 American International Group (US-18)
619 American Stores (US-304)
73 Ameritech (US-49)
269 Amgen (US-138)
85 Amoco (US-54)
517 AMP (US-248)
300 AMR (US-149)
920 AmSouth Bancorporation (US-441)
659 Amvescap (BR-83)
992 Anadarko Petroleum (US-478)
981 Analog Devices (US-472)
177 Anheuser-Busch (US-93)
401 Aon (US-194)
364 Applied Materials (US-179)
400 Archer Daniels Midland (US-193)
757 Arco Chemical (US-366)
692 Ares-Serono (SWI-16)
420 Argentaria, Corp. Bancaria de España (SP-8)
487 Asahi Bank (JA-47)
694 Asahi Breweries (JA-74)
825 Asahi Chemical Industry (JA-93)
663 Asahi Glass (JA-71)
518 Ascend Communications (US-249)
486 ASDA Group (BR-59)
727 ASM Lithography Holding (NE-19)
114 Assicurazioni Generali (IT-4)
522 Associated British Foods (BR-64)
150 Associates First Capital (US-78)
115 Astra (SWE-2)
964 At Home (US-466,
16 [illegible]
158 Atlantic Richfield (US-80)
766 Atlas Copco (SWE-17)
398 Australia & New Zealand Banking (AS-7)
214 Automatic Data Processing (US-110)
827 Autostrade (IT-22)
814 AutoZone (US-391)
779 Avery Dennison (US-376)
403 Avon Products (US-196)
985 Axa Colonia Konzern (GE-46)
94 Axa-UAP (FR-3)

B

140 B.A.T. Industries (BR-15)
324 BAA (BR-39)
479 Baan (NE-15)
687 Baker Hughes (US-335)
844 Baloise Holding (SWI-18)
899 Baltimore Gas & Electric (US-432)
98 Banc One (US-59)
411 Banco Commercio Italiano (IT-11)
394 Banca di Roma (IT-10)
721 Banca Fideuram (IT-20)
353 Banca Intesa (IT-9)
105 Banco Bilbao Vizcaya (SP-2)
350 Banco Central (SP-7)
665 Banco Comercial Portugues (PO-3)
135 Banco de Santander (SP-3)
961 Banco Espirito Santo (PO-4)
493 Banco Popular Español (SP-10)
457 Bank Austria (AT-1)
474 Bank of Ireland (IR-2)
284 Bank of Montreal (CA-6)
172 Bank of New York (US-89)
315 Bank of Nova Scotia (CA-9)
295 Bank of Scotland (BR-34)
68 Bank of Tokyo-Mitsubishi (JA-3)
56 BankAmerica (US-39)
267 BankBoston (US-137)
349 Bankers Trust (US-171)
771 Bankgesellschaft Berlin (GE-36)
227 Banque Nationale de Paris (FR-15)
83 Barclays Bank (BR-8)
593 Barrick Gold (CA-14)
137 BASF (GE-14)
288 Bass (BR-31)
258 Baxter International (US-133)
682 Bay Networks (US-333)
100 Bayer (GE-9)
247 Bayersche Hypotheken- und Wechsel (GE-19)
155 Bayerische Vereinsbank (GE-16)
467 BB&T (US-224)
876 BC Telecom (CA-27)
130 BCE (Bell Canada Enterprises) (CA-2)
683 Bear Stearns (US-334)
496 Becton, Dickinson (US-237)
803 Beiersdorf (GE-39)
35 Bell Atlantic (US-23)
44 BellSouth (US-29)
585 Beneficial (US-284)
716 Benelux Paribas (Compagnie) (BE-12)
991 Benetton Group (IT-23)
22 Berkshire Hathaway (US-16)
783 Berliner Kraft & Licht (GE-38)
256 Bestfoods (US-132)
201 BG (BR-21)
942 BIC (FR-47)
786 Billiton (BR-92)
951 BK Vision (SWI-20)
747 Black & Decker (US-361)
880 Block (H&R) (US-421)
847 Blue Circle Industries (BR-96)
464 BMC Software (US-222)
160 BMW (GE-17)
556 BOC Group (BR-69)
75 Boeing (US-50)
494 Bombardier (CA-11)
306 Boots (BR-37)
338 Boston Scientific (US-166)
863 Bouygues (FR-45)
891 Brambles Industries (AS-11)
221 Bridgestone (JA-19)
14 Bristol-Myers Squibb (US-11)
988 Britannic Assurance (BR-112)
260 British Aerospace (BR-27)
393 British Airways (BR-48)
636 British Energy (BR-82)
732 British Land (BR-88)
26 British Petroleum (BR-2)
351 British Sky Broadcasting Group (BR-43)
817 British Steel (BR-93)
40 British Telecommunications (BR-6)
236 Broken Hill Proprietary (AS-4)
989 Brown-Forman (US-477)
644 Browning-Ferris Industries (US-315)
395 BTR (BR-49)
263 Burlington Northern Santa Fe (US-135)
577 Burlington Resources (US-278)
944 Burmah Castrol (BR-108)

C

154 Cable & Wireless (BR-17)
371 Cable & Wireless Communs. (BR-45)
960 Cablevision Systems (US-464)
268 Cadbury Schweppes (BR-28)
586 Cadence Design Systems (US-285)
163 Campbell Soup (US-82)
298 Canadian Imperial Bank (CA-7)
815 Canadian National Railway (CA-19)
446 Canadian Pacific (CA-10)
722 Canal Plus (FR-37)
197 Canon (JA-16)
430 Cap Gemini (FR-25)
646 Capital One Financial (US-316)
441 Cardinal Health (US-214)
906 Carlsberg (DE-7)
845 Carlton Communications (BR-95)
202 Carnival (US-104)
673 Carolina Power & Light (US-328)
167 Carrefour (FR-8)
934 Case (US-449)
690 Casino, Guichard-Perrachon (FR-35)
203 Caterpillar (US-105)
173 CBS (US-90)
222 Cendant (US-112)
737 Central & South West (US-358)
525 Central Japan Railway (JA-51)
599 Centrica (BR-73)
979 Century Telephone (US-471)
877 Champion International (US-419)
703 Chancellor Media (US-345)
489 Charles Schwab (US-233)
919 Charter One Financial (US-440)
53 Chase Manhattan (US-36)
336 Cheung Kong Holdings (HK-4)
823 Cheung Kong Infrastructure (HK-12)
65 Chevron (US-44)
710 Christian Dior (FR-36)
99 Chrysler (US-60)
311 Chubb (US-154)
391 Chubu Electric Power (JA-40)
787 Chugoku Electric Power (JA-88)
463 Ciba Spezialitaetenchemie (SWI-11)
788 Ciena (US-377)
283 Cigna (US-145)
930 Cincinnati Bell (US-448)
608 Cincinnati Financial (US-297)
808 CINergy (US-387)
903 Cintas (US-435)
952 Circuit City Stores (US-459)
30 Cisco Systems (US-19)
801 CIT Group (US-384)
793 CITIC Pacific (HK-11)
38 Citicorp (US-26)
460 Clariant (SWI-10)
359 Clear Channel Communications (US-176)
498 Clorox (US-239)
406 CLP Holdings (HK-6)
912 CMS Energy (US-439)
468 CNA Financial (US-225)
573 Coastal (US-276)
4 Coca-Cola (US-3)
670 Coca-Cola Amatil (AS-8)
289 Coca-Cola Enterprises (US-146)
499 Cognizant (US-240)
796 Coles Myer (AS-10)
152 Colgate-Palmolive (US-79)
867 Columbia Energy Group (US-416)
193 Columbia/HCA Healthcare (US-100)
325 Comcast (US-161)
426 Comerica (US-206)
330 Commercial Union Assurance (BR-41)
220 Commerzbank (GE-18)
397 Commonwealth Bank of Australia (AS-6)
82 Compaq Computer (US-53)
614 Compass Group (BR-76)
139 Computer Associates International (US-72)
533 Computer Sciences (US-258)
521 Compuware (US-252)
310 ConAgra (US-153)
497 Conseco (US-238)
434 Consolidated Edison (US-210)
758 Consolidated Natural Gas (US-367)
965 Consolidated Stores (US-467)
552 Cooper Industries (US-266)
476 Corning (US-229)
333 Costco (US-164)
818 Countrywide Credit (US-393)
360 Cox Communications (US-177)
745 Crédit Commercial de France (FR-39)
NR Credit Communal/Dexia Belgium (BE-13)
805 Crédit Lyonnais (FR-42)
52 Crédit Suisse Group (SWI-4)
259 Credito Italiano (IT-6)
967 Crescent Real Estate (US-468)
656 Crestar Financial (US-321)
746 CRH (IR-4)
655 Crown Cork & Seal (US-320)
418 CSX (US-203)
309 CVS (US-152)

D

331 Dai Nippon Printing (JA-31)
211 Dai-Ichi Kangyo Bank (JA-17)
861 Daily Mail & General Trust (BR-98)
66 Daimler-Benz (GE-4)
971 Daiwa House Industry (JA-112)
813 Daiwa Securities (JA-91)
442 Dampskibsselskabet Af 1912 (DE-3)
450 Dampskibsselskabet Svenborg (DE-4)
749 Dana (US-362)
943 Danaher (US-455)
781 Dassault Systemes (FR-41)
199 Dayton Hudson (US-103)
647 DDI (JA-69)
322 Deere (US-159)
708 Degussa (GE-32)
63 Dell Computer (US-42)
495 Delta Air Lines (US-236)
639 Den Danske Bank (DE-5)
272 Denso (JA-24)
77 Deutsche Bank (GE-5)
459 Deutsche Lufthansa (GE-24)
32 Deutsche Telekom (GE-2)
744 Development Bank of Singapore (SI-3)
416 Dexia (FR/BE-NR)
NR Dexia France (FR-43)
84 Diageo (BR-9)
630 Diamond Offshore Drilling (US-309)
531 Digital Equipment (US-257)
896 Dillard's (US-431)
976 Dixons Group (BR-111)
763 Dollar General (US-369)
553 Dominion Resources (US-267)
800 Donaldson, Lufkin & Jenrette (US-383)
660 Donnelley & Sons (R.R.) (US-323)
538 Dordtsche Petroleum (NE-16)
516 Dover (US-247)
183 Dow Chemical (US-97)
870 Dow Jones (US-417)
136 Dresdner Bank (GE-13)
527 Dresser Industries (US-253)
718 DTE Energy (US-353)
195 Duke Energy (US-101)
715 Dun & Bradstreet (US-351)
23 DuPont (US-17)

E

217 East Japan Railway (JA-18)
775 Eastman Chemical (US-375)
170 Eastman Kodak (US-87)
658 Eaton (US-322)
986 Ecolab (US-476)
689 Edison (IT-19)
408 Edison International (US-198)
872 El Paso Natural Gas (US-418)
594 Elan (IR-3)
305 Electrabel (BE-1)
804 Electrafina (BE-15)
262 Electricidade de Portugal (PO-1)
993 Electrocomponents (BR-114)
588 Electrolux (SWE-13)
231 Electronic Data Systems (US-119)
91 Elf Aquitaine (FR-2)
37 Eli Lilly (US-25)
NR Elsevier (NE-12)
914 EMAP (BR-105)
198 EMC (US-102)
145 Emerson Electric (US-76)
634 EMI Group (BR-80)
162 Endesa (SP-4)
57 ENI (IT-1)
264 Enron (US-136)
654 Entergy (US-319)
881 Enterprise Oil (BR-101)
802 Equifax (US-385)
271 Equitable (US-139)
613 Equity Office Properties (US-299)
854 Equity Residential Properties (US-408)
308 Ergo Versicherungsgruppe (GE-22)
60 Ericsson (L.M.) (SWE-1)
723 Eridania Beghin-Say (FR-38)
947 Essilor International (FR-48)
567 Estee Lauder (US-272)
661 EXEL (US-324)
5 Exxon (US-4)

F

866 Fairfax Financial Holdings (CA-24)
47 Fannie Mae (US-32)
492 Fanuc (JA-48)
466 FDX (US-223)
125 Federal Home Loan Mortgage (US-69)
396 Federated Department Stores (US-191)
191 Fiat Group (IT-5)
370 Fifth Third Bancorp (US-181)
523 Financiere Richemont (Compagnie) (SWI-14)
161 First Chicago NBD (US-81)
281 First Data (US-143)
983 First Security (US-474)
973 First Tennessee Natl. (US-469)
62 First Union (US-41)
773 Firstar (US-374)
637 FirstEnergy (US-311)
168 Fleet Financial Group (US-86)
984 Florida Progress (US-475)
412 Foreningssparbanken (SWE-7)
893 Food Lion (US-428)
46 Ford Motor (US-31)
413 Fort James (US-201)
169 Fortis (NE/BE-NR)
NR Fortis AG (BE-4)
NR Fortis AMEV (NE-11)
632 Fortune Brands (US-310)
409 FPL Group (US-199)
59 France Telecom (FR-1)
339 Franklin Resources (US-167)
937 Fresenius (GE-45)
782 Fresenius Medical Care (GE-37)
791 Frontier (US-378)
287 Fuji Bank (JA-26)
238 Fuji Photo Film (JA-20)
190 Fujitsu (JA-14)

G

963 Galileo Intl. (US-465)
218 Gannett (US-111)
192 Gap (US-99)
429 Gas Natural SDG (SP-9)
607 Gateway 2000 (US-296)
503 Genentech (US-242)
389 General Accident (BR-47)
736 General Dynamics (US-357)
1 General Electric (US-1)
179 General Electric Co. (BR-20)
404 General Mills (US-197)
69 General Motors (US-45)
245 General Re (US-126)
348 Générale de Banque (BE-3)
693 Genuine Parts (US-337)
855 George Weston (CA-23)
707 Georgia-Pacific Group (US-347)
907 Getronics (NE-23)
41 Gillette (US-27)
407 GKN (BR-51)
17 Glaxo Wellcome (BR-1)
676 Golden West Financial (US-330)
378 Goodyear Tire & Rubber (US-185)
836 GPU (US-403)
799 Grainger (W.W.) (US-382)
244 Granada Group (BR-24)
292 Great Universal Stores (BR-32)
760 Green Tree Financial (US-368)
769 Groupe Bruxelles Lambert (BE-14)
209 Groupe Danone (FR-11)
319 Groupe Schneider (FR-19)
611 Groupe UCB (BE-9)
58 GTE (US-40)
743 Guardian Royal Exchange (BR-90)
452 Guidant (US-216)

H

852 Hachijuni Bank (JA-96)
873 Hagemeyer (NE-22)
93 Halifax (BR-11)
332 Halliburton (US-163)
293 Hang Seng Bank (HK-3)
756 Harley-Davidson (US-365)
318 Hartford Financial Services Group (US-15)
597 Hartford Life (US-292)
812 Hasbro (US-390)
657 Havas (FR-33)
558 Hays (BR-70)
337 HBO & Co. (US-165)
843 Health Management Assocs. (US-407)
375 Healthsouth (US-184)
671 Heidelberger Druckmaschinen (GE-30)
846 Heidelberger Zement (GE-40)
352 Heineken (NE-10)
774 Heineken Holding (NE-20)
213 Heinz (H.J.) (US-109)
686 Henderson Land Development (HK-7)
347 Henkel (GE-23)
367 Hennes & Mauritz (SWE-5)
953 Hercules (US-460)
439 Hershey Foods (US-213)
828 Hertz (US-396)
42 Hewlett-Packard (US-28)
945 Hillenbrand (US-456)
554 Hilton Hotels (US-268)
181 Hitachi Ltd. (JA-12)
132 Hoechst (GE-12)
477 Holderbank Financière Glarus (SWI-1)
54 Home Depot (US-37)
111 Honda Motor (JA-5)
410 Honeywell (US-200)
188 Hong Kong Telecommunications (HK)
726 Hong Kong & China Gas (HK-10)
704 Hongkong Electric Holdings (HK-8)
1000 Host Marriott (US-480)
290 Household International (US-147)
530 Houston Industries (US-256)
39 HSBC Holdings (BR-5)
208 Hughes Electronics (US-107)
797 Humana (US-380)
666 Huntington Bancshares (US-326)
200 Hutchison Whampoa (HK-2)

I

278 Iberdrola (SP-6)
253 Illinois Tool Works (US-130)
512 Imasco (CA-12)
304 Imperial Chemical Industries (BR-36)
524 Imperial Oil (CA-13)
990 Imperial Tobacco Group (BR-113)
688 Incentive (SWE-14)
265 Industrial Bank of Japan (JA-22)
43 ING Groep (NE-2)
578 Ingersoll-Rand (US-279)
697 Ingram Micro (US-340)
10 Intel (US-8)
13 International Business Machines (US)
795 International Flavors & Fragrances (US)
296 International Paper (US-148)
534 Interpublic Group (US-259)
592 Intimate Brands (US-289)
386 Investor (SWE-6)
321 Istituto Bancario San Paolo Di Torino (IT)
428 Istituto Mobiliare Italiano (IT-12)
334 Ist. Nazionale delle Assicurazioni (IT)

465 M... (JA-44
811 M... (A...
372 Mitsubishi Estate (JA-36)
363 Mitsubishi Heavy Industries (JA-33)
368 Mitsubishi Trust & Banking (JA-35)
532 Mitsui & Co. (JA-52)
641 M... (JA-...
49 M... (...
923 M... (...
112 Monsanto (US-62)
566 Montedison (IT-17)
72 Morgan Stanley Dean Witter (US-48)
180 Morgan (J.P.) (US-95)
118 Motorola (US-64)
96 Muenchener Rueck (GE-7)
610 Murata Mfg. (JA-63)

N

341 Nabisco Holdings (US-169)
207 National Australia Bank (AS-3)
178 National City (US-94)
484 National Grid Group (BR-58)
379 National Power (BR-46)
119 National Westminster Bank (BR-14)
33 NationsBank (US-21)
741 Nationwide Financial Svcs. (US-360)
257 NEC (JA-21)
27 Nestle (SWI-3)
996 NetCom Systems (SWE-21)
939 Network Associates (US-452)
807 New Century Energies (US-386)
897 New World Development (HK-13)
625 New York Times (US-307)
826 Newbridge Networks (CA-22)
559 Newell (US-269)
928 Newmont Gold (US-447)
184 News Corp. (AS-2)
702 Next... Communications (US-344)
908 Nichi... (JA-103)
314 Nike (US-155)
875 Nikko Securities (JA-99)
313 Nintendo (JA-29)
706 Nippon Express (JA-75)
969 Nippon Paper Industries (JA-110)
365 Nippon Steel (JA-34)
8 Nippon Telegraph & Telephone (JA-1)
972 Nippon Yusen (JA-113)
563 Nissan Motor (JA-55)
87 Nokia (FI-1)
189 Nomura Securities (JA-13)
932 Noranda (CA-29)
478 Nordbanken Holding (SWE-10)
767 Nordstrom (US-372)
357 Norfolk Southern (US-175)
424 Norsk Hydro (NO-1)
915 Northern Rock (BR-106)
941 Northern States (US-454)
106 Northern Telecom (CA-1)
547 Northern Trust (US-263)
591 Northrop Grumman (US-288)
910 Northwest Airlines (US-438)
129 Norwest (US-70)
294 Norwich Union (BR-33)
759 Nova Corp. (CA-16)
11 Novartis (SWI-1)
361 Novo-Nordisk (DE-2)
431 NTT Data (JA-42)
895 Nucor (US-430)

O

850 OCBC Overseas Chinese Bank (SI-4)
454 Occidental Petroleum (US-218)
865 Office Depot (US-415)
926 Oji Paper (JA-105)
908 Old Republic Intl. (US-479)
994 Olivetti (IT-24)
543 Omnicom Group (US-261)
995 Omron (JA-116)
171 Oracle (US-88)
482 Orange (BR-56)
110 Oréal (L') (FR-5)
946 Orix (JA-107)
911 Orkla (NO-2)
753 Osaka Gas (JA-83)
664 Owens-Illinois (US-325)

P

936 Paccar (US-451)
616 PacifiCorp (US-301)
700 PaineWebber Group (US-342)
529 PanAmSat (US-255)
980 Pancanadian Petroleum (CA-31)
520 Parametric Technology (US-251)
255 Paribas (FR-17)
894 Parker Hannifin (US-429)
709 Paychex (US-348)
415 Pearson (BR-52)
958 Pechiney (FR-50)
667 PECO Energy (US-327)
505 Peninsular & Oriental Steam Nav. (BR-62)
228 Penney (J.C.) (US-116)
438 PeopleSoft (US-212)
51 PepsiCo (US-35)
955 Pernod Ricard (FR-49)
874 Petro-Canada (CA-26)
455 Petrofina (BE-7)
445 Peugeot (FR-27)
7 Pfizer (US-6)
354 PG&E (US-172)
853 Pharma Vision 2000 (SWI-19)
176 Pharmacia & Upjohn (US-92)
21 Philip Morris (US-15)
102 Philips Electronics (NE-5)
317 Phillips Petroleum (US-156)
215 Pinault-Printemps-Redoute (FR-13)
570 Pioneer Hi-Bred International (US-274)
662 Pirelli (IT-18)
323 Pitney Bowes (US-160)
239 PNC Bank (US-123)
451 Polygram (NE-13)
864 Popular (US-414)
851 Porsche (GE-41)
435 Portugal Telecom (PO-2)
871 Potash Corp. of Saskatchewan (CA-25)
931 Power Corp. of Canada (CA-28)
535 PowerGen (BR-66)
320 PPG Industries (US-158)
550 Praxair (US-264)
742 Preussag (GE-35)
948 Price (T. Rowe) (US-457)
12 Procter & Gamble (US-9)
437 Progressive (US-211)
887 Promise (JA-100)
469 Promodès Group (FR-28)
824 Provident (US-395)
956 Provident Financial (BR-109)
696 Providian Financial (US-339)
153 Prudential (BR-16)
560 Public Service Enterprise Group (US-270)

Q

542 Qu... (US-...)
615 Q... (...)

R

860 R&B Falcon (US-413)
448 Railtrack Group (BR-55)
356 Ralston Purina Group (US-174)
699 Randstad Holding (NE-18)
916 Rank Group (BR-107)
506 RAS (IT-14)
784 Ratin (DE-6)
225 Raytheon (US-114)
526 Reckitt & Colman (BR-65)
194 Reed Elsevier (NE/BR-NR)
NR Reed International (BR-53)
679 Regions Financial (US-332)
328 Renault (FR-20)
206 Rentokil Initial (BR-22)
250 Repsol (SP-5)
381 Republic Industries (US-186)
612 Republic New York (US-298)
246 Reuters Group (BR-25)
957 Reynolds Metals (US-462)
204 Rhône-Poulenc (FR-10)
575 Ricoh (JA-59)
240 Rio Tinto (AS/BR-NR)
NR Rio Tinto Ltd. (AS-12)
NR Rio Tinto PLC (BR-38)
473 Rite Aid (US-227)
475 RJR Nabisco Holdings (US-228)
839 RMC Group (BR-94)
878 Robert Half International (US-420)
15 Roche Holding (SWI-2)
399 Rockwell International (US-192)
345 Rohm (JA-32)
629 Rohm & Haas (US-308)
605 Rolls-Royce (BR-75)
248 Royal and Sun Alliance Insurance (BR-26)
219 Royal Bank of Canada (CA-3)
286 Royal Bank of Scotland Group (BR-30)
731 Royal Caribbean Cruises (US-356)
NR Royal Dutch Petroleum (NE-1)
3 Royal Dutch/Shell Group (NE/BR-NR)
674 Royale Belge (BE-10)
841 Rubbermaid (US-406)
146 RWE (GE-15)

S

713 S... (...
882 SABRE Group Holdings (US-422)
643 Safeco (US-314)
235 Safeway (US-121)
635 Safeway PLC (BR-81)
275 Sainsbury (J.) (BR-29)
233 Saint-Gobain (Compagnie de) (FR-16)
388 Sakura Bank (JA-38)
548 Sandvik (SWE-11)
390 Sankyo (JA-39)
335 Sanofi (FR-21)
982 Santa Fe International (US-473)
156 Sanwa Bank (JA-10)
740 Sanyo Electric (JA-80)
61 SAP (GE-3)
141 Sara Lee (US-73)
34 SBC Communications (US-22)
830 Scania (SWE-20)
541 Schering (GE-27)
48 Schering-Plough (US-33)
88 Schlumberger (US-56)
504 Schroders (BR-61)
500 Scottish & Newcastle Breweries (BR-60)
405 Scottish Power (BR-50)
940 Scripps (E.W.) (US-453)
728 Seagate Technology (US-355)
274 Seagram (CA-5)
905 Sealed Air (US-437)
166 Sears, Roebuck (US-85)
638 Secom (JA-66)
898 Securicor (BR-103)
316 Seibu Railway (JA-30)
778 Sekisui House (JA-87)
901 Sema Group (BR-104)
417 Service Corp. International (US-202)
675 ServiceMaster (US-329)
147 Seven-Eleven Japan (JA-8)
754 Severn Trent (BR-91)
510 Sharp (JA-50)
821 Shell Canada (CA-21)
NR Shell Transport & Trading (BR-4)
717 Sherwin-Williams (US-352)
587 Shin-Etsu Chemical (JA-60)
837 Shiseido (JA-94)
501 Shizuoka Bank (JA-49)
326 Siebe (BR-40)
97 Siemens (GE-8)
600 Singapore Airlines (SI-2)
187 Singapore Telecommunications (SI-1)
574 Skandia Forsakring (SWE-12)
444 Skandinaviska Enskilda Banken (SWE-9)
761 Skanska (SWE-16)
618 SLM Holding (US-303)
762 SMC (JA-84)
50 SmithKline Beecham (BR-7)
848 Smiths Industries (BR-97)
918 Société Centrale du GAN (FR-46)
212 Société Générale (FR-12)
327 Société Générale de Belgique (BE-2)
681 Sodexho Alliance (FR-34)
856 Solectron (US-409)
678 Solvay (BE-11)
935 Sonat (US-450)
103 Sony (JA-4)
929 Sony Music Entertainment (JA-106)
223 Southern Co. (US-113)
962 Southern Electric (BR-110)
922 Southern New Eng. Tel. (US-443)
649 SouthTrust (US-317)
701 Southwest Airlines (US-343)
121 Sprint (US-66)
730 Stagecoach Holdings (BR-87)
342 Standard Chartered (BR-42)
949 Stanley Works (US-458)
603 Staples (US-295)
711 Star Banc (US-349)
959 Starbucks (US-463)
491 Starwood Hotels & Resorts (US-235)
387 State Street (US-189)
885 Steelcase (US-425)
382 STMicroelectronics (FR-23)
789 Stora Kopparbergs Bergslags (SWE-18)
900 Storage Technology (US-433)
422 St. Paul (US-205)
186 Suez Lyonnaise des Eaux (FR-9)
131 Sumitomo Bank (JA-7)
925 Sumitomo Chemical (JA-104)
733 Sumitomo Corp. (JA-78)
565 Sumitomo Electric Industries (JA-56)
842 Sumitomo Metal Industries (JA-95)
645 Sumitomo Trust & Banking (JA-68)
490 Summit Bancorporation (US-234)
369 Sun Hung Kai Properties (HK-5)
580 Sun Life and Provincial Holdings (BR-71)
273 Sun Microsystems (US-140)
461 SunAmerica (US-220)
251 SunTrust Banks (US-128)
755 Svenska Cellulosa Aktiebolaget (SWE-15)
436 Svenska Handelsbanken (SWE-8)
719 Swire Pacific (HK-9)
138 Swiss Bank Corp. (SWI-8)
109 Swiss Re (SWI-6)
806 Sydkraft (SWE-19)
705 Synovus Financial (US-346)
539 Synthélabo (FR-30)
545 Sysco (US-262)

T

987 Tabacalera (SP-11)
633 Taisho Pharmaceutical (JA-65)
174 Takeda Chemical Industries (JA-11)
902 Tandy (US-434)
584 TCI Ventures (US-283)
419 TDK (JA-41)
343 Tele Danmark (DE-1)
536 Telecom Corp. of New Zealand (NZ-1)
67 Telecom Italia (IT-2)
230 Tele-Communications (US-118)
78 Telefónica (SP-1)
449 Teleport Communications Group (US-215)
329 Tellabs (US-162)
128 Telstra (AS-1)
402 Tenet Healthcare (US-195)
602 Tenneco (US-294)
216 Tesco (BR-23)
120 Texaco (US-65)
205 Texas Instruments (US-106)
453 Texas Utilities (US-217)
346 Textron (US-170)
680 Thames Water (BR-85)
739 Thermo Electron (US-359)
241 Thomson (CA-4)
849 Thomson-CSF (FR-44)
481 3Com (US-231)
684 3i Group (BR-86)
485 Thyssen (GE-25)
879 TI Group (BR-100)
80 TIM (IT-3)
76 Time Warner (US-51)
725 Times Mirror (US-354)
576 TJX (US-277)
622 Tohoku Electric Power (JA-64)
380 Tokai Bank (JA-37)
285 Tokio Marine & Fire (JA-25)
151 Tokyo Electric Power (JA-9)
748 Tokyo Electron (JA-81)
712 Tokyo Gas (JA-76)
621 Tomkins (BR-77)
562 Toppan Printing (JA-54)
609 Toray Industries (JA-62)
698 Torchmark (US-341)
312 Toronto-Dominion Bank (CA-8)
829 Tosco (US-397)
307 Toshiba (JA-28)
127 TOTAL (FR-6)
978 Total System Services (US-470)
966 Toyo Trust & Banking (JA-109)
822 Toyoda Automatic Loom Works (JA-92)
18 Toyota Motor (JA-2)
582 Toys 'R' Us (US-281)
383 Tractebel (BE-5)
595 Transamerica (US-290)
794 TransCanada PipeLines (CA-18)
835 Transocean Offshore (US-402)
36 Travelers Group (US-24)
254 Travelers Property Casualty (US-131)
528 Tribune (US-254)
859 Tricon Global Restaurants (US-412)
642 TRW (US-313)
117 Tyco International (US-63)
840 Tyson Foods (US-405)

U

134 U.S. Bancorp (US-71)
884 UAL (US-424)
81 UBS (SWI-5)
579 Unicom (US-280)
938 Unidanmark (DE-8)
24 Unilever (NE/BR-NR)
NR Unilever NV (NE-3)
NR Unilever PLC (BR-12)
623 Union Carbide (US-306)
355 Union Pacific (US-173)
810 Union Pacific Resources Group (US-389)
838 Union Planters (US-404)
765 UnionBanCal (US-371)
677 Unisys (US-331)
340 United Healthcare (US-168)
604 United News & Media (BR-74)
185 United Technologies (US-98)
581 United Utilities (BR-72)
507 Unocal (US-243)
561 UNUM (US-271)
537 UPM-Kymmene (FI-2)
601 US Airways Group (US-293)
164 U S West (US-83)
427 USA Waste Services (US-207)
974 Usinor (FR-51)
831 UST (US-398)
432 USX-Marathon Group (US-208)

V

631 Valeo (FR-32)
927 Vastar Resources (US-446)
116 VEBA (GE-10)
792 Vendex International (NE-21)
650 VEW (GE-29)
553 VF (US-318)
210 Viacom (US-108)
279 VIAG (GE-21)
144 Vivendi (FR-7)
648 VNU (NE-17)
108 Vodafone Group (BR-13)
122 Volkswagen (GE-11)
297 Volvo (SWE-4)

W

252 Wachovia (US-129)
9 Wal-Mart Stores (US-7)
237 Walgreen (US-122)
31 Walt Disney (US-20)
64 Warner-Lambert (US-43)
226 Washington Mutual (US-115)
751 Washington Post (US-364)
282 Waste Management (US-144)
890 WellPoint Health (US-427)
124 Wells Fargo (US-68)
571 West Japan Railway (JA-58)
858 Western Atlas (US-411)
344 Westpac Banking (AS-5)
433 Weyerhaeuser (US-209)
798 Whirlpool (US-381)
544 Whitbread (BR-67)
303 Williams (US-151)
735 Williams (BR-89)
695 Winn-Dixie Stores (US-338)
997 Wolseley (BR-115)
456 Wolters Kluwer (NE-14)
483 Woolwich (BR-57)
71 WorldCom (US-47)
862 WPP Group (BR-99)
384 Wrigley (Wm.) Jr. (US-187)

XYZ

107 Xerox (US-61)
834 Yahoo! (US-401)
569 Yamanouchi Pharmaceutical (JA-57)
868 Yamato Transport (JA-97)
90 Zeneca Group (BR-10)
133 Zurich Insurance Group (SWI-7)

THE WINNERS IN A LOSING YEAR

Crises in emerging markets reshuffled the deck dramatically

From Moscow to Manila to Medellín, emerging markets this year have been united under one law: Murphy's. Anything that could go wrong, did. Currencies have been devalued, banks have gone bust, and commodity prices have plunged to record lows. And just when it seemed the worst was over, economic crises in Russia and Japan have investors wondering if emerging markets will stay submerged indefinitely. Heavily indebted Russia is dipping into its foreign exchange reserves to support the shaky ruble. And Japan's economic slump could drag down all of Asia.

Indeed, these are trying times for even the biggest and best-managed operations, as reflected in BUSINESS WEEK's 1998 rankings of the world's top 100 emerging-market companies. Morgan Stanley Capital International ranks companies by market capitalization as of May 29. This year's No. 1 company, Gazprom, the world's largest natural gas producer, has seen its market value plunge by 23% since last year. Rocked by financial crisis, many Southeast Asian companies have fallen off the BUSINESS WEEK list, or dropped sharply in value. Korea Electric Power Corp., for instance, moves from No. 5 to No. 32. And while Brazil's Telebrás and South Africa's Anglo American Corp. once again rank among the world's top emerging-market groups, their market capitalizations are also down from last year.

This year, in fact, it's the smaller economies and markets that appear as relative winners in the BUSINESS WEEK emerging-market 100. Several companies from Greece, Turkey, Israel, and the Czech Republic have vaulted onto the list for the first time, or moved upward. That's because their markets, thanks to their proximity to Europe, have managed to hold on to or even attract investors who have fled Asia. Indeed, the Athens Stock Exchange is up 61% since Jan. 1. With a market capitalization of $4.8 billion, Hellenic Bottling Co., a distributor in Russia and Nigeria as well as Greece, catapulted onto the list at No. 51.

TELECOM TITANS. The Istanbul Stock Exchange has also risen 33% this year. "Central Europe and the Middle East have limited financial and trade linkages to Asia, high levels of foreign exchange reserves, and strong macroeconomic policies," says Mohamed El Erian, the European head of emerging markets research for Salomon Smith Barn in London.

With other markets in turmoil, h ever, the companies best insulated fr deflationary winds seem to be those high-growth industries such as telec munications. Telecom companies fr Greece, Mexico, China, and Brazil do inate the top 10 in BUSINESS WEEK's l Making its appearance for the first ti is China Telecom (Hong Kong), No. 3 provider of cellular services in th Chinese provinces, the company w public last fall.

A number of Taiwanese technol companies stand out as well—desp the slump in the Taiwan Stock Inc which is down 25% from last Augu high. Asustek Computer Inc., wh went public in 1996, joined the BU NESS WEEK list for the first time wit market value of $6 billion. Thanks its expansion in Europe, L America, the U.S., and Ch Asustek is the world's No maker of computer moth boards, after Intel Corp. company earned $212 million $650 million in sales in 19 and sales are expected to $1 billion this year. N Asustek is pushing into h end notebook computers servers. "We are focusing products where we can leve our [engineering] strengt says Asustek CEO Jonney S

All these, however, bright spots against a gener dark picture in Asia and o markets. Analysts are not guine about prospects for R ian oil stocks such as Lu No. 25, hurt by plunging prices and the nearly 50% lapse in Russia's market year. While they haven't hit as hard, Brazil's Bov has fallen 10% and Mex stock index has dropped in dollar terms since Jan.

In Brazil, financial-ser companies faced a difficult

ENGINEERING MIGHT

Asustek worker in Taiwan. The world's No. 2 maker of motherboards focuses on expansion overseas

BUBBLING EXPORTS

Corona beer, made by Mexico's Grupo Modelo, overtook Heineken last year to become the leading import in the U.S. beer market

r the government jacked up interest
s last October to 43% to support
real. Although rates have since fall-
back to 21%, the economy is expect-
to grow just 1.5% this year. One
ıdout in the financial sector, however,
anco Itaú, which rose from No. 39 to
19 on BUSINESS WEEK's list and lift-
ts market cap by 16%, to $7.7 billion.
Itaú, whose shares are up 10% so far this year, is one of the few bright spots on the São Paulo Stock Exchange.

In Mexico, meanwhile, consumer spending has been fueling growth—notwithstanding the slump in the stock market. Although the government is keeping a tight rein on money and spending to compensate for collapsing oil revenues, gross domestic product growth is expected to reach a healthy 5% this year. The most spectacular performance has come from Grupo Modelo, which produces Corona beer. Not only are Corona sales rising in Mexico, the brand also overtook Heineken last year to become the leading import in the U. S. beer market.

Will companies such as Grupo Modelo, Hellenic Bottling, and China Telecom (Hong Kong) remain winners if the crisis in emerging markets is prolonged? Asian, Russian, and Latin markets are continuing to witness an exodus of investors. Still, the BUSINESS WEEK list of the world's top 100 emerging-markets companies shows that even in turbulent times, there are always companies that manage to survive, and even thrive.

By Kerry Capell in London, with Elisabeth Malkin in Mexico City, Jonathan Moore in Taipei, Ian Katz in São Paulo, and bureau reports

ıe Top 100 Emerging-Market Companies

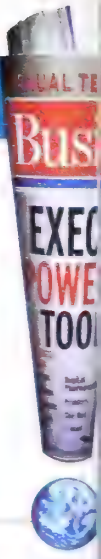
ANK 1997		COUNTRY	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S $	%CHANGE FROM 1997 (U S $)	(LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U S $ MIL	PROFITS U S $ MIL	ASSETS U S $ MIL	RETURN ON EQUITY %	INDUSTRY CODE
2	GAZPROM	Russia	32906	14	-23	-23	0.4	23	0.2	20462a	1456a	NA	1.9	12
1	TELEBRAS	Brazil	32759	106	-23	-17	1.2	10	1.6	13739	3390	41373	12.2	55
NR	CHINA TELECOM (HONG KONG)	China	20676	2	NA	NA	2.6	35	0.0	1871	599	NA	7.6c	55
7	TELEFONOS DE MEXICO (TELMEX)	Mexico	19999	2	8	20	1.9	13	3.3	6873	1455	14396	14.6	55
3	ELETROBRAS	Brazil	18101	33	-29	-24	0.4	6	2.5	5297	2936	84393	5.5	12
4	PETROBRAS	Brazil	17871	193	-19	-13	1.1	15	2.7	16910	1313	33208	7.6	11
16	TAIWAN SEMICONDUCTOR MFG.	Taiwan	14595	4	25	53	7.1	23	0.0	1293	529	NA	31.5	34
19	HELLENIC TELECOMMUNICATIONS ORGANIZATION	Greece	13334	29	19	33	4.5	21	2.0	2662	649	NA	21.9	55
8	CATHAY LIFE INSURANCE	Taiwan	12748	4	-20	-3	6.2	21	2.0	NA	543	NA	29.6	63
6	TELECOMUNICACOES DE SAO PAULO (TELESP)	Brazil	12257	214	-11	-4	1.3	12	4.7	3979*	992*	12328*	10.8	55
12	ANGLO AMERICAN	South Africa	11317	48	-18	-6	1.5	7	2.9	NA	1378	8921	21.0	81
18	YPF	Argentina	10983	31	4	4	1.6	14	2.8	6147	877	10146a*	11.3	11
NR	FIRSTRAND	South Africa	10614	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	62
23	SOUTH AFRICAN BREWERIES	South Africa	9843	28	0	16	6.0	24	2.3	7164	377	4644	24.6	43
44	BANCO DO BRASIL	Brazil	8967	13	43	53	1.7	18	0.0	NA	499	NA	9.6	61
25	VALE DO RIO DOCE	Brazil	8072	21	-6	1	1.0	10	5.6	4568	657	14822	9.7	25
30	BANCO BRADESCO	Brazil	7945	8	3	11	1.6	11	7.2	NA	722	53650	14.0	61
14	DE BEERS CONSOLIDATED MINES	South Africa	7920	21	41	-31	0.9	7	4.7	NA	1087	NA	12.0	26
39	BANCO ITAU	Brazil	7724	595	16	25	1.9	11	2.7	NA	627	NA	17.1	61
26	TELEFONICA DE ARGENTINA	Argentina	7712	3	-9	-9	2.0	14	3.4	2997	474	6327	13.9	55
45	HINDUSTAN LEVER	India	7613	38	23	43	25.2	55	1.1	1876*	139*	846*	46.0	44
13	UNIFIED ENERGY SYSTEM	Russia	7589	0.2	-44	-44	0.6	5	0.5	15764a	1406a	NA	10.7	12
65	GRUPO MODELO	Mexico	7564	9	49	66	3.9	40	0.4	1757	190	NA	9.8	43
36	LIBERTY LIFE ASSOCIATION OF AFRICA	South Africa	7354	28	-1	15	2.2	20	2.7	1849	369	15998a	11.0	63
20	LUKOIL HOLDING	Russia	7294	10	-31	-31	0.9	13	0.4	7134a	623a	NA	6.8	11
28	UNITED MICROELECTRONICS	Taiwan	7058	2	-18	-0	4.2	25	0.0	738*	287*	NA	17.2	35
56	CIFRA	Mexico	6943	1	-5	6	2.7	31	1.8	3725	223	3461	8.7	54
10	TELEKOM MALAYSIA	Malaysia	6871	2	-54	-29	2.3	14	1.4	1866	477	6303	16.1	55
37	CHINA DEVELOPMENT	Taiwan	6840	3	-12	7	3.5	32	0.0	NA	213*	NA	10.8	62
17	FIRST COMMERCIAL BANK	Taiwan	6405	2	-48	-37	3.2	30	1.4	NA	174*	NA	10.7	61
55	STANDARD BANK INVESTMENT	South Africa	6314	5	17	35	3.2	16	1.8	NA	388	NA	19.7	61
5	KOREA ELECTRIC POWER (KEPCO)	Korea	6293	10	-68	-49	0.5	17	3.2	9319*	360*	25339a*	3.1	12

ɜd on nonconsolidated results. a) Based on 1996 data. b) Based on 1998 data. c) Difference between earnings and book value between 12 and 18 months. LOSS=Negative ratio. NA=Not ble. NEG=Negative return. NM= Not meaningful. †Data for this company provided by Standard & Poors Compustat.

Data: Morgan Stanley Capital International

SPECIAL EDITORIAL REPORT

PROFIT FROM THE NEW ECONOMY



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ıe Top 100 Emerging-Market Companies

ANK 1997		COUNTRY	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S. $	%CHANGE FROM 1997 (U.S. $)	%CHANGE FROM 1997 (LOCAL)	PRICE BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S. $ MIL	ASSETS U.S. $ MIL	RETURN ON EQUITY %	INDUSTRY CODE
78	NEDCOR	South Africa	6170	27	37	59	4.5	22	1.6	NA	277	NA	20.7	61
62	TELECOM ARGENTINA	Argentina	6106	6	16	16	2.4	17	4.2	2586	307	5796	14.3	55
76	GRUPO TELEVISA	Mexico	6058	20	37	53	3.5	9	0.0	1603	675	3486	38.5	51
22	CHANG HWA COMMERCIAL BANK	Taiwan	6054	2	-46	-34	3.6	32	1.3	NA	157*	NA	11.2	61
NR	ASUSTEK COMPUTER	Taiwan	6008	19	NA	NA	15.5	29	0.0	NA	207	NA	53.3c	33
NR	MATAV	Hungary	5912	6	NA	NA	6.7	46	0.6	1186	168	NA	14.3	55
21	HUA NAN BANK	Taiwan	5886	2	-47	-36	4.9	24	1.4	NA	190*	NA	20.5	61
71	KIMBERLY-CLARK DE MEXICO	Mexico	5747	4	20	34	4.7	24	2.7	1167	244	1704	20.0	45
68	CEMEX	Mexico	5647	4	11	24	1.7	7	0.0	3461	695	9139	23.4	21
NR	TELESP CELULAR	Brazil	5282	92	NA	NA	5.0	NA	NA	NA	NA	NA	NA	55
101	TURKIYE IS BANKASI	Turkey	5261	0.04	55	183	5.4	14	1.6	NA	314*	NA	39.5	61
51	CEMIG	Brazil	5252	33	-12	-5	0.8	17	5.5	1912*	270*	9743*	4.5	12
11	TENAGA NASIONAL	Malaysia	5126	2	-64	-45	1.2	-7	0.8	2608	-37	9946	NEG	12
24	SAMSUNG ELECTRONICS	Korea	5035	38	-48	-18	1.3	54	0.9	13119*	88*	11253a*	2.3c	41
50	TELEFONICA DEL PERU	Peru	5021	2	-16	-10	2.7	13	2.8	1356	380	2446a	21.8	55
85	ABSA GROUP	South Africa	4991	8	27	47	2.7	19	1.9	NA	256	NA	14.4	62
29	CHINA STEEL	Taiwan	4946	1	-37	-23	1.5	11	5.4	2590*	398*	NA	13.6	25
32	SASOL	South Africa	4812	8	-35	-25	2.0	10	3.6	3066	505	4071	19.9	22
NR	HELLENIC BOTTLING	Greece	4788	34	77	98	17.2	61	0.7	470a	57a	NA	28.2	43
48	COMPANHIA SANEAMENTO BASICO SAO PAULO (SABESP)	Brazil	4720	170	21	-15	0.7	14	2.0	2523*	243*	NA	4.8	52
54	GRUPO CARSO	Mexico	4697	5	-9	1	2.6	8	2.2	NA	597	4184	33.2	71
35	NAN YA PLASTICS	Taiwan	4666	2	-37	-24	2.3	25	1.7	3322	184	NA	9.0	22
42	PEREZ COMPANC	Argentina	4640	6	-28	-28	2.1	13	2.2	1622	361	4516	15.9	11
38	TELECOMUNICACIONES DE CHILE (CTC)	Chile	4638	5	-34	-28	2.1	15	3.0	1385	364	4110a	13.6	55
60	NACIONAL TELEFONOS DE VENEZUELA (CANTV)	Venezuela	4424	4	-16	-6	1.7	10	5.2	2014	494	NA	17.1c	55
58	SHIN KONG LIFE INSURANCE	Taiwan	4405	2	-17	1	5.3	25	1.8	NA	176a	NA	21.5	63
178	NATIONAL BANK OF GREECE	Greece	4334	144	35	50	4.1	51	2.5	NA	63a	NA	8.0	61
61	REMBRANDT GROUP	South Africa	4298	8	-18	-6	1.9	11	2.1	NA	369	2759	17.9	43
57	CERVEJARIA BRAHMA	Brazil	4273	582	-20	-14	3.4	11	2.9	2416	397	NA	30.9	43
53	ENDESA	Chile	4214	1	-29	-23	1.6	19	5.0	1408	258	5758a	8.3	12
114	ADVANCED SEMICONDUCTOR ENGINEERING (ASE)	Taiwan	4191	2	34	64	8.3	19	0.0	379	218	NA	43.8	35
183	TUPRAS-TURKIYE PETROL RAFINERILERI	Turkey	4167	0.1	91	250	29.0	533	0.0	2358*	-113*	NA	5.4	11
119	SPT TELECOM	Czech Republic	4142	129	39	41	1.6	22	0.0	1213	183	NA	7.1	55
121	ALPHA CREDIT BANK	Greece	4135	104	41	58	6.0	24	2.4	NA	155a	NA	25.0	61

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e Top 100 Emerging-Market Companies

41	PETRONAS GAS	Malaysia	4110	1	-37	-4	4.6	17	1.7	381b	245b	1640	27.3c	12
64	FORMOSA PLASTICS	Taiwan	4093	2	-28	-12	3.4	30	1.3	NA	149	NA	11.2	22
10	ITC	India	4051	17	35	58	13.1	32	0.7	738b	126b	764	40.8c	43
94	GRUPO FINANCIERO BANACCI	Mexico	4035	2	18	29	1.4	13	0.0	NA	252	2024a	10.5	61
NR	DIMENSION DATA HOLDINGS	South Africa	3789	7	101	132	44.9	108	0.0	324	30	NA	41.7	52
11	BANK HAPOALIM	Israel	3785	3	36	46	1.5	14	2.2	NA	286	NA	10.5	61
80	RELIANCE INDUSTRIES	India	3780	4	4	10	1.8	10	2.1	3216b	397b	4688	19.0c	22
84	LIBERTY HOLDINGS	South Africa	3688	75	-3	12	1.9	18	2.9	4083	207	16178a	10.6	63
74	AKBANK	Turkey	3678	0.03	-22	43	2.3	9	5.5	NA	348	NA	27.3	61
63	LIGHT-SERVICOS DE ELETRICIDADE	Brazil	3658	352	-30	-24	1.7	12	7.6	1414	282	3122	14.7	12
89	MAHANAGAR TELEPHONE NIGAM	India	3623	5	-31	-20	3.1	14	0.9	1098b	257b	NA	21.7c	55
NR	FEMSA	Mexico	3616	33	NA	NA	2.9	18	NA	2781	201	NA	15.8	43
81	COPEC	Chile	3610	3	-39	-34	1.0	16	1.7	NA	220	5322a	6.1	11
81	INVESTEC GROUP	South Africa	3455	44	32	52	4.1	35	1.3	NA	82	NA	11.6	61
NR	PANAMERICAN BEVERAGES	Mexico	3413	34	17	17	1.7	24	0.7	1993	118	1705	7.4	43
71	ENERSIS	Chile	3404	1	19	-19	2.2	13	4.9	2931	227	9082a	14.7	12
47	POHANG IRON & STEEL (POSCO)	Korea	3295	34	-48	-17	0.6	6	2.1	6904	518	10185a	10.3	25
96	UNIBANCO	Brazil	3277	33	-5	2	1.4	8	4.1	NA	375	NA	16.4	61
18	MALAYAN BANKING	Malaysia	3215	1	-73	-59	3.0	22	0.7	NA	644	28756	13.7	61
71	GRUPO INDUSTRIAL BIMBO	Mexico	3127	2	38	54	2.6	26	3.5	2096	112	1410	10.1	44
47	AYALA	Philippines	3114	0.3	-50	17	3.6	19	0.4	NA	164	2001a	18.7c	71
8	PT TELEKOMUNIKASI INDONESIA	Indonesia	3097	0.3	-80	-9	3.6	99	1.3	523	102	1767	3.7	55
76	STATE BANK OF INDIA	India	3060	6	-32	-21	1.6	9	1.7	NA	319	NA	17.1	61
59	COMPANHIA ENERGETICA DE SAO PAULO (CESP)	Brazil	3054	33	40	36	0.2	3	0.0	3398	1088	26130	9.4	12
NR	HACI OMER SABANCI HOLDING	Turkey	3049	0.1	NA	NA	6.9	41	1.8	NA	68	NA	16.7	71
81	KOC HOLDING	Turkey	3040	0.2	34	146	15.7	46	1.4	NA	55	99a	33.8	71
90	AYALA LAND	Philippines	2958	0.3	-49	-24	4.6	32	0.4	NA	168	NA	14.2	64
49	BANGKOK BANK	Thailand	2944	2	-77	-63	0.8	-112	2.4	NA	104	35069	NEG	61
NR	HON HAI PRECISION INDUSTRY	Taiwan	2922	4	49	81	11.0	35	0.0	408a	54a	NA	31.4	34
77	INTERNATIONAL COMMERCIAL BANK OF CHINA	Taiwan	2911	1	-33	-19	2.7	19	1.6	NA	157	NA	14.5	61
66	SAN MIGUEL	Philippines	2908	2	-48	-23	3.5	65	1.3	NA	76	2539a	5.4c	43
81	ACER	Taiwan	2878	1	-34	-21	2.2	23	0.0	2068	110	NA	9.4	33
78	BANK LEUMI LE-ISRAEL	Israel	2856	2	30	41	1.2	8	2.7	NA	345	NA	15.3	61
93	ALFA	Mexico	2852	3	-20	-10	1.4	9	1.8	3697	384	5086	14.8	71

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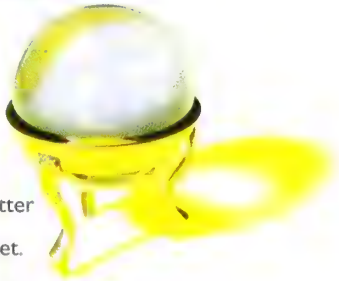
STORY #194:

My Wonderfully Predictable Future



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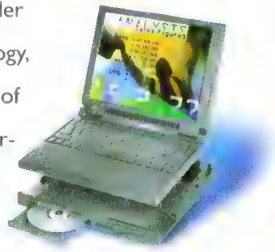

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Cover Story

THE STOR

How Steven Spielberg sustains his creative empire

Steven Spielberg is a busy guy these days. Just back from New York, where he was doing advance promotion for his latest movie, *Saving Private Ryan*, he is knee-deep in last-minute details. Although the film is to be released in late July, Spielberg is still spending his mornings holed up at the film lab, determined not to sign off on the movie until the World War II epic has the adequately faded look of a 1940s-era documentary.

Spielberg is consumed with making *Saving Private Ryan* a critical as well as a commercial success. DreamWorks SKG, the studio he created with entertainment moguls Jeffrey Katzenberg and David Geffen, has so far released a spate of unimpressive films, including Spielberg's *Amistad*. That disappointment has raised anew the question of whether Spielberg can consistently turn out top-notch serious fare along the lines of *Schindler's List*, which is now five years old. Never a fan of opening nights, Spielberg has drastically cut back the number of people he will allow to see the new film before it is released and has no intention of sitting through the preview himself. "It's flop sweat," he says. "My stomach can't take it."

If that were not enough pressure, Spielberg's days are also packed with meetings on the more than 60 other projects he has in development at DreamWorks. On any given day, three conference rooms within steps of his office are filled with studio execs, movie stars, and scriptwriters, all anxiously awaiting Spielberg's arrival. Projects on the boards cover everything from a computer-animated version of *The Cat in the Hat* children's book to a biography of Charles Lindbergh.

Waiting for Spielberg to walk through the door, as anyone in Hollywood will tell you, is itself considered a privilege. He is easily Hollywood's most successful director and producer, with credits that read like guideposts to an entire generation's pop culture. Beginning with his 1975 summer horror-adventure, *Jaws*, Spielberg has directed 6 of the 25 top-grossing films, including *Jurassic Park*, *Raiders of the Lost Ark*, and *E.T., the Extraterrestrial*. In an industry where only 3 out of every 10 movies make money, 13 of the 16 films he's directed have been in the black. All told, they've pulled in an astounding $5 billion worldwide. As a producer, Spielberg has brought in another $4 billion.

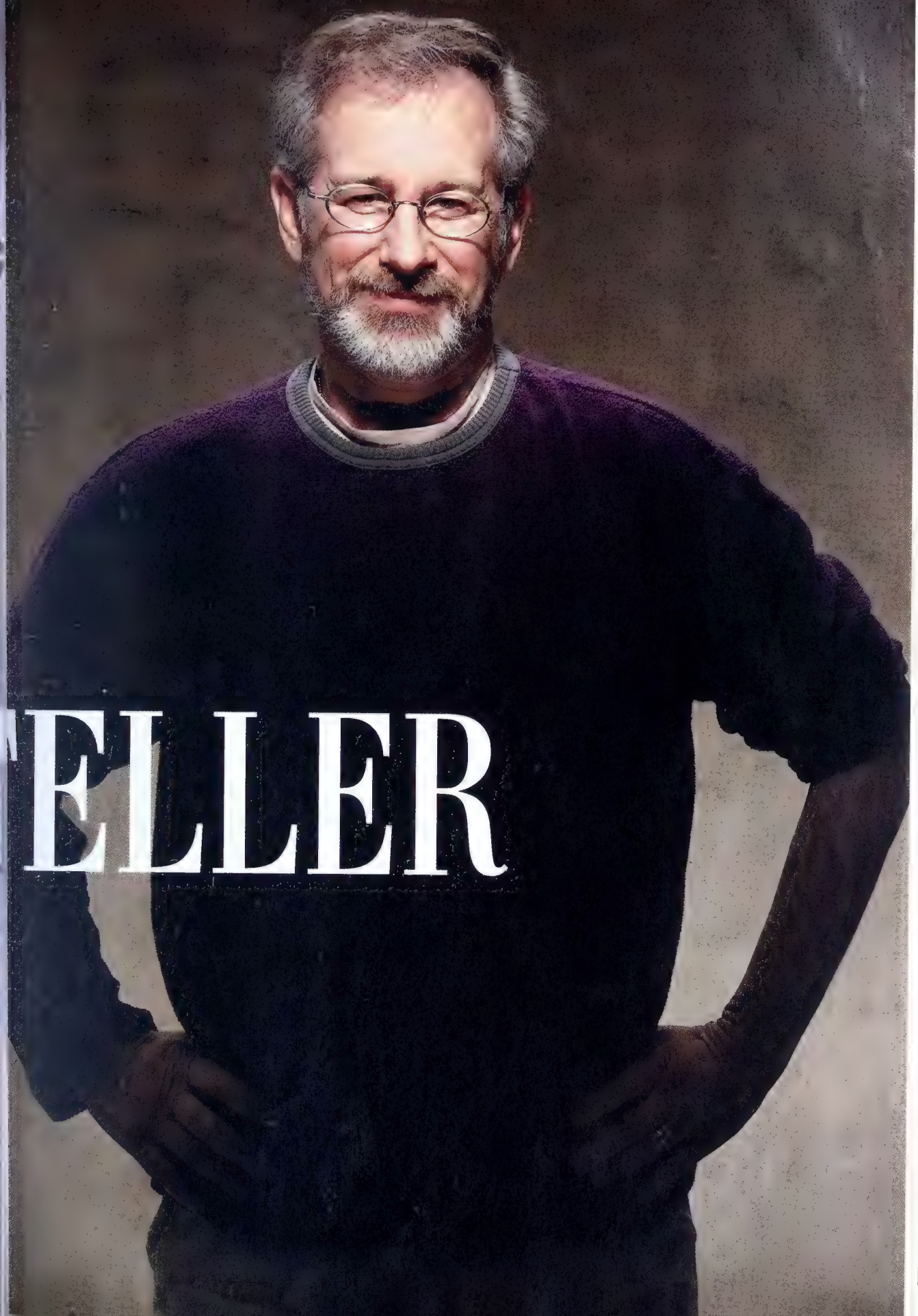
His talents aren't limited to the movie set. Spielberg has also proven to be one of Hollywood's most nimble entrepreneurs, amassing a business empire that includes video games, toys, even restaurants. It is a measure of his importance to DreamWorks that his partners have given him unusual independence, allowing him to direct and even produce films for other studios. To satisfy his near-obsessive interest in video arcades, DreamWorks created a joint venture with Sega and Universal Studios so that he could provide creative input. "When we first started DreamWorks, I said to Jeffrey, 'We ought to call this new company the Spielberg Brothers,'" jokes Geffen. "Anything Steven thinks is important, we want to invest in."

And invest they have. This summer, DreamWorks will have three films that are expected to do serious box office business (page 102). One, the meteor film *Deep Impact* that Paramount Pictures Corp. and DreamWorks share, has already passed $240 million. Spielberg is also the creative spark behind six animated TV shows, including five being made by Warner Brothers. On the side, Spielberg is producing another potential blockbuster, *The Mask of Zorro*, for Sony's TriStar Pictures unit. And he is helping Universal Studios Inc. design theme park rides at its Hollywood and Orlando parks.

His various interests and considerable successes have made Spielberg a vastly wealthy man, with a fortune estimat close to $2 billion: about $1 billion in studio and other hol and nearly as much from movie profits. But what keeps one that wealthy, that powerful, that successful going? does he sustain his boundless creative energy? Like artists, he has a gift for tapping his rich inner life. But his fellow creators are often felled by the knotty proble the real world, Spielberg has also mastered the art of agement. Like the best CEOs, he knows how to inspire, vate, and delegate. He's even good at managing money.

EARLY START. Spielberg has done all this in pursuit o overriding goal: to tell as many great stories to as people as will listen. And that's what he has always about. The son of a computer scientist and a gifted pi Spielberg spent his early childhood in New Jersey and, Arizona. From the very beginning, his fertile imagin went into overdrive, filling his young mind with images would later inspire his filmmaking.

Even decades later, Spielberg says h vivid memories of his earliest years, are the origins of some of his biggest He attributes *E.T.* to the unsettling leading up to his parent's 1966 divorce ing: "It is really about a young boy wh in search of some stability in his life." *Encounters of the Third Kind* was ins by early morning meteor-gazing with ther, a sci-fi fanatic, when he was four


ELLER

old. "He was scared of just about everything," recalls his mother, Leah Adler. "When trees brushed against the house, he would head into my bed. And that's just the kind of scary stuff he would put in films like *Poltergeist*." To this day, Spielberg's wife, actress Kate Capshaw, says her husband remains terrified of airplane and elevator rides and closed-in places.

In high school, Spielberg experienced another kind of terror, which would one day help him understand the subject of his film *Schindler's List*. It was his senior year, and the family had just moved from Phoenix to Saratoga, Calif., an affluent San Francisco suburb. There, Spielberg says, he was tormented by anti-Semitic remarks from his classmates, who would sneeze "Hah-Jew" when he passed in the halls. After school, jocks often beat him up. With his parents' divorce looming, Spielberg's grades sank. He barely graduated from high school and was rejected from both UCLA and USC film schools. Settling for California State University at Long Beach because it was close to Hollywood, Spielberg got a C in his television production course. He dropped out in his senior year.

It was all very sobering, especially since Spielberg had long since made up his mind to be a director. The homemade movies he started making as a young boy gave Spielberg a powerful escape from his fears. was 11 when he first got his hands on his dad's 8-millim Bell & Howell wind-up camera and began shooting short fi about flying saucers and World War II battles. Before long, entire family was selling tickets and making lemonade for ing-room showings. "It cost me about $50 to make the mo and I would charge a quarter a ticket, and at the end of summer I might have $55," he recalls today. "That's kind of way Hollywood works today, small margins."

Spielberg's knack for scary storytelling enabled him fortlessly to torture his three younger sisters and made it ier for him to forge friendships. On Boy Scout camping t

THE ADVENTURES OF STEVEN SPIELBERG

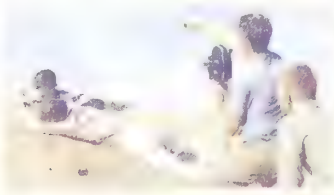
1946 Born, Cincinnati.

1949 Spielberg family moves to New Jersey.

1957 Family moves to Phoenix.

1957 Makes first film, *The Last Train Wreck*, using his dad's 8mm home-movie camera and his electric train set. Length: 3 minutes.

1959–1962 World War II drama, *Escape to Nowhere*, wins first prize in a statewide amateur film contest. Judges praise the film's special effects and battlefield scenes.



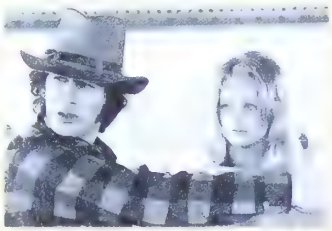
1963–1964 *Firelight*, his feature about alien abductions, grosses $800 at a local theater. Remade in '77 as *Close Encounters of the Third Kind.*

1964 Gets first studio job as a gofer for Universal. Family moves to northern California.

1965 Graduates high-school and enters California State University at Long Beach.

1966 Parents divorce.

1969 Makes *Amblin*, a 26-minute film about a pair of teenage hitchhikers that leads to a seven-year contract with Universal directing television shows. Quits college.



1974 *Sugarland Express*, Spielberg's first theatrical film, is released.

1975 *Jaws*, Spielberg's first blockbuster, opens on t of July weekend. Movie eventually takes in $260 m

1979 Spielberg mar actress Amy Irving, son, Max, is born in The couple divorces

1981 *Raiders of the*

lways thought he was a little
ty," recalls Richard Y. Hoffman
leader of Troop 294. "He'd go off
he woods and find a couple of
gs to cook his marshmallows and
nies, and then run off looking at
ething or another, and his fire
ld go out." But when night fell,
lberg became the center of at-
ion. "Stevie would start telling
ghost stories," says Hoffman, "and
yone would suddenly get quiet
iat they could all hear it."

ow 51, Spielberg is still telling
ies with as much passion as the kid in the tent. He is
ch more in touch with his subconscious than most people,"
Joseph McBride, author of the unauthorized biography
en Spielberg. "He remembers what went on and its sig-
ance to him, and he has an outlet—making movies—that
oo many other people have."

sk him where he gets his ideas, and Spielberg shrugs.
process for me is mostly intuitive," he says. "There
ilms that I feel that I need to make, for a variety of rea-
, for personal reasons, for reasons that I want to have
that the subject matter is cool, that I think my kids will
it. And sometimes I just think that it will make a lot of
ey, like the sequel to *Jurassic Park*."

ER DRAMAS. Increasingly, rather than living off the frag-
s of his own subconscious, Spielberg is drawing inspiration
the seven children, aged 18 months to 21 years, who live
him: three from his marriage to Capshaw, one each from
ious marriages, and two he and Capshaw have adopted,

both of whom are African American.

Like others, Spielberg has changed dramatically as he has settled into fatherhood. As part of his deal with DreamWorks, he leaves each night in time for dinner. There, he presides over a family storytelling ritual: Spielberg throws out the kernel of an idea, then hands it over to one of his kids, who adds a few lines and passes it on to the next. After about 20 minutes and several turns around the table, Spielberg often brings the story to a crescendo. "Sometimes it ends up funny, sometimes you're crying it is so sad," says Capshaw, his wife of seven years. "But it's never uninteresting."

None of these tales has made it onto the screen yet, but Spielberg's decision to make *Schindler's List*, which had been sitting on his shelf for nearly 10 years after he bought the rights, came in large part because of the family. "He rediscovered his Judaism when he had a family and realized he had something to pass on to them," says his wife, who converted to Judaism shortly before marrying Spielberg. "I think it happens that way in many people when they have families."

Spielberg continues to make TV cartoons, he says, "because my kids think I'm cool when I do it.... Maybe when Destry—she's only 18 months old—gets past the cartoon stage, I'll stop." Often, he brings home pilots of upcoming shows, movies, and video games to try out on his built-in audience. Dream-

LUCAS AND SPIELBERG

Both directors forgo fees in favor of a percentage of gross revenues

The ExtraTerres-
s. A huge hit, it
400 million.

lberg launches
tertainment to
ature movies,
eries, and
cartoons.

d War II epic
the Sun, set in
ns to rave
takes in a
million at the

1991 Spielberg marries actress Kate Capshaw, one of the Indiana Jones heroines.

1993 Spielberg finishes both *Jurassic Park* and *Schindler's List*. Takes 3 years off from filmmaking.

1994 Spielberg wins Academy Award for Best Director for *Schindler's List*, which also wins Best Picture. Spielberg launches DreamWorks with partners Jeffrey Katzenberg and David Geffen.

1997 *Amistad* opens. The story of African slaves who seize control of a Spanish slave ship barely breaks even.

1998 *Saving Private Ryan* opens in July.

FROM TOP: FROM THE MURRAY GLOSE LUCAS/AMBLIN—TRIBUNE MEDIA SERVICES; DAVID JAMES/UNIVERSAL; DAVID JAMES/DREAMWORKS/PARAMOUNT PICTURES; UNIVERSAL CITY STUDIOS; MAUREEN LAMBRAY/GAMMA-LIAISON; GLOBE PHOTOS

Works' first interactive product, the modest-selling *Someone's in the Kitchen*, was modeled after his daily morning routine of making pancakes and waffles for the family.

Even Spielberg's home office is set up for time with his kids. Along with his parrots, Buddy and Oliver, his snakes, and a fish tank, the home office features a large playhouse in the corner. "I'll come in, and he'll be crawling around down there with one of the kids, when I know he went in there to try to do some work," says Capshaw. Spielberg is the first to concede he has decidedly ungrown-up passions: "I have a case of arrested adolescence with occasional bouts of existential maturity."

Of course, when those bouts of maturity do strike, as they clearly did in *Schindler's List*, the results can be overpowering. Spielberg took three years off after completing the film, just to recover. But sustaining his steady stream of storytelling takes more than just enforced relaxation and family support. There are the headaches that plague any business executive—the financial, logistical, and managerial problems that are all the more daunting because of the gargantuan projects Spielberg often tackles.

Spielberg depends on a small, tightly knit group. The DreamWorks film unit is run by husband-and-wife team Walter Parkes and Laurie MacDonald, both accomplished filmmakers and longtime Spielberg friends. Their job interview? While visiting Spielberg's vacation home in East Hampton, they watched *The Apartment*, the 1960 Jack Lemmon film. "Walter began analyzing it, how it worked as a film, and he broke down the characters and the structure," says Spielberg. "And I said, 'My God, you should be running my company.'"

On Thursday mornings when he's not on location, they present Spielberg with their best crop of new ideas and update him on the progress of dozens of other projects already in production. What follows is a brainstorming free-for-all. Spielberg starts off by listening politely, then abruptly interrupts with a series of rapid-fire questions as he gobbles down low-fat cookies. Then he tends to launch into a monologue about where he sees the story going. "'Let me get back to you' isn't in his vocabulary," says Parkes. "He has succeeded for so long on his stincts that he is not afraid to tell you exactly what he thinl

When Spielberg likes a project, he sometimes green-lig it on the spot. Although he alone has the authority to com money to an idea, once he does, things move quickly. Sp berg has a cast of collaborators ready to jump into acti "There is something special that happens when Steven si onto a project," says Columbia TriStar Vice-Chairman L Fischer, who made 14 films with Spielberg while she was Warner Brothers and Columbia. "You know you're going get the best special effects, best directors, everything."

As a director, Spielberg a reputation for coaxing best performances out of eve one from small children stars. "It's Spielberg, so work that much harder please him," says Tom Har who plays the lead role in *S ing Private Ryan*. As a p ducer, when Spielberg sen the director is on the ri track, he stays in the ba ground. "You can't dictate ativity to someone else, an you do, the project fails. Ste understands that, which is we all want to work with hi says Robert Zemeckis, who made such hits as *Back to Future* and *Who Fra Roger Rabbit?* for Spielber

For less proven talent, Sp berg pitches in, immersing h self in casting, reworkin script, or devising some spe effect. While he often inv comment, even dissent, in end, his gut rules. On the s to-be-released *The Mask Zorro*, Spielberg sent in single-spaced pages of sc changes the day after Ch mas, even though the st was shut down. When on the young screenwriters, Elliot, disagreed with som Spielberg's prescriptions, S berg listened attentively, overruled him. "He sent memo a couple of days l that in essence said, 'Look, is Hollywood, this is how done.' O. K., so we did it way," he says.

FLOUR POWER. He also deeply involved with m matters—especially bud That's rare in an industry w $100 million bombs are be ing commonplace and tale directors such as Francis Coppola and Michael Ci have severely damaged thei reers with profligate spend

As a boy, Spielberg lea that if he wanted to r movies, he had to watch

SPIELBERG'S ENTERTAINMENT EMPIRE

Amblin Entertainment

(pre-DreamWorks movies, TV shows, and TV cartoons)

▶ 100% ownership, estimated value: **$400 million**

DreamWorks

▶ Spielberg heads live-action film unit, gearing up to produce **nine films a year**

▶ **Sega GameWorks LLC**, above (joint venture with Universal Studios and Sega Enterprises). Five giant futuristic video arcades in Seattle, Las Vegas, Tempe, Ariz., Grapevine, Tex., and Ontario, Calif.; also smaller GameWorks studio in Puente Hills, Calif.

▶ **DreamWorks Interactive** (joint venture with Microsoft). Creates video games for computers and playstations

▶ Spielberg's 22% stake has an estimated value of **$550 million**

Other Investments

▶ **Dive!** His 50% ownership of gourmet sub and sandwich restaurant (Jeffrey Katzenberg owns the other 50%) with locations in Los Angeles and Las Vegas is estimated to be worth **$6 million**

▶ **idealab!** A 15% stake in the Internet-content company, worth **$7.5 million**

▶ Stakes in idealab! spin-offs **CitySearch** and **tickets.com** worth another estimated **$5 million**

Total estimated value: **$1 Billion**

m line. Movie film was expensive, forcing him to edit in his to save footage, a practice he still employs. To simulate ex- ons, Spielberg relied on bags of flour hurled into the air. this day, Spielberg is always on the lookout for ways to costs down. On *Saving Private Ryan*, the construction built a radar facility facing in the wrong direction— ht into the sun. "A lot of directors might have torn the down and started over again, costing someone a heck of of money," says Hanks. But Spielberg quickly adjusted hot he needed, making do with what he had. "I have been around a director who works so fast," adds s. "You set up, and he shoots the scene and goes on to ext one. A bunch of us on this movie had directed our novies, and we all stood around amazed."

saving is too small for Spielberg. When he showed up on for *Amistad*, a refrigerator wasn't working, and Spielberg roducer Debbie Allen not to pay for it. But that was the f Allen's problems. Just weeks before shooting was to be- pielberg called up demanding that she cut $20 million out already trimmed-down $56 million budget. "He told me, y, that film isn't getting made until it has a '3' in front of lget, so get cutting." So Allen scrambled to change most shooting from Africa Caribbean, and the came in on budget.

lberg, of course, isn't ne to cost overruns. his first big hit, was ted at $3.5 million and up costing $9.8 mil- And both *Hook* and two of his less suc- l films, were vastly udget. Even so, over urse of his long ca- e has been on target re often than most.

lberg isn't just good ing money, he's good ting it—primarily by ever-smarter deals nself. Early in his ca- e was content to earn -sum fee on each pic- e directed—$1 million se *Encounters*, for in- Then, in 1981, when ected *Raiders of the rk* for George Lucas, ned to forgo big fees

The Producer as Philanthropist

As chairman of Starbright, Spielberg provides online links to children's hospital wards

in favor of a percentage of gross revenues. Since then, for each film he directs, he gets close to 20¢ for every $1 that the studio gets. For those he produces, the split is 50-50, after the studio covers its production, marketing, and distribution costs. And then there are the profits from video sales and royalties on merchandise. In the case of *Jurassic Park*, the movie grossed more than $950 million and Spielberg's take was $294 million.

KINDLY MONSTERS. These days, Spielberg's attentions are drawn to far more than just movie ideas and feature-length films. Thanks again to his clan of kids, Spielberg has assigned two members of DreamWorks' consumer-products unit to report directly to him on new toys for him to turn into animated films or cartoon shows. One, called Igor, was the inspiration for *Toonsylvania*, a cartoon show about kindly monsters that is now spawning its own toy line.

An even stronger interest for Spielberg is Sega GameWorks, a DreamWorks partnership with Sega Enterprises and Universal to build futuristic video arcades and rides across the country. It was he who designed the dark, warehouse-style interiors of the arcades, and the games and rides that clang away in the cavernous space.

Although he is generally a conservative investor, with roughly 80% of his holdings in cash or other liquid assets, Spielberg is dipping a toe in the raging online world with a 15% stake, or about $10 million, in idealab!, a Pasadena Internet-content company and several associated operations. He also serves as the creative funnel in a joint venture with Microsoft Corp., called DreamWorks Interactive, to make online games. And to sate his appetite for fast food, an affliction he shares with Katzenberg, the two have

Anatomy of a Spielberg Hit

Jurassic Park *grosses $951 million...and Spielberg walks away with $294 million. Here's how:*

- ▶ 50% of gross goes to the studio, in this case Universal.
- ▶ Spielberg's 17.5% of the studio's take gives him a cut of **$83 million**.
- ▶ He then gets 50% of studio profits. After Universal pays Spielberg his $83 million, plus production, advertising, and distribution costs of $120 million, the movie makes $242 million, of which Amblin, wholly owned by Spielberg, gets **$121 million**.
- ▶ 50% of profits from video sales. Spielberg takes home another **$60 million**.
- ▶ 50% of TV/cable fees. Spielberg hauls in **$20 million**.
- ▶ 50% of royalties on *Jurassic Park* toys and other merchandise. Spielberg gets **$10 million**.

Total: **$294 Million**

started two submarine-themed restaurants called Dive!

The last few years have also kindled in Spielberg a philanthropic urge that has him spending big chunks of money and time on issues he cares deeply about. After making *Schindler's List*, he spent $85 million to support Jewish culture and education. One project: recording video histories of more than 41,000 Holocaust survivors. Spielberg often watches the videos as they're being recorded via a high-speed hookup from his office. As chairman of the Starbright Foundation, which provides online links to children's wards in hospitals, Spielberg has enlisted his Hollywood friends to help raise $40 million. He often visits hospi helping ailing children explore new media.

Whatever else he does, Spielberg will always find time fun. He is an avid skeet shooter, even threatening to tak General Norman Schwartzkopf, who chairs Starbright's c tal campaign. And ever the kid, he stops by nearly every at DreamWorks Interactive to play some of its new v games. Often, he brings one of his kids along for a sec opinion. Does he ever worry that he will run out of ideas don't have enough time in a lifetime to tell all the stori want to tell," says Spielberg. It sounds like the master ryteller is going to be busy for a long time to come.

By Ronald Grover in Los Ang

Cover Story

WILL THIS BE DREAMWORKS' DREAM SUMMER?

Steven Spielberg isn't the only one hustling on DreamWorks' projects. His partner Jeffrey Katzenberg has his own four animated films to complete over the next three years. On a recent June evening, Katzenberg was huddled with composer Hans Zimmer, trying to work out the kinks in the soundtrack of *El Dorado*, DreamWorks' animated musical about Hernán Cortéz and Montezuma. After trying for more than an hour to patch up a poorly sung number, the pair threw up their hands and went out to get a Chinese dinner.

That's DreamWorks in a nutshell, ever since Spielberg, Katzenberg, and David Geffen launched their ambitious new studio back in 1994: lots of work and mixed results. So far, there have been no big hits of the sort envisioned when the studio was first formed. The studio's first theatrical release, *The Peacemaker*, a George Clooney thriller about a nuclear attack on New York, barely broke even. The same pattern held for *Amistad*, the true story of a slave-ship uprising and Spielberg's first DreamWorks film. The other two movies DreamWorks has released made only small profits.

Now, that could be about to change. The betting in Hollywood is that DreamWorks will have a couple of big hits by the end of the summer. Over the next two months, the studio is set to release two new films: Spielberg's *Saving Private Ryan*—which some studio execs say is among his finest work—and *Small Soldiers*, the *Toy Story*-gone-bonkers tale of little action figures who take over a town. Later in the year, DreamWorks will release the $73 million animated story of Moses, *The Prince of Egypt*.

Cranking up the first new Hollywood studio in 65 years has been a slow and enormously expensive undertaking. So far, the studio has burned through nearly half the $2.7 billion in private equity and debt it originally raised. But DreamWorks, which now employs 1,600 people, has been gradually building its film, television, and music units. Spielberg is in charge of feature films and TV animation, while Katzenberg, the former Walt Disney Co. studio chief, takes on his alma mater in animated features and television series. Meanwhile, Geffen is the primary dealmaker and also heads the music business.

THREE MEN AND A STUDIO

So far, Spielberg, Geffen, and Katzenberg haven't met expectations

Geffen, for one, is predicting that even a modestly successful crop of movies, TV, and CDs should yield $300 million in positive cash flow by the end of 1999. That's about what the DreamWorks team expected from the beginning, they say. "When we first got started, people wanted drive-through results from us," says Katzenberg. "They weren't ready to wait for the food to be cooked. Now we're cooking."

CRAP SHOOT. Already, DreamWorks is getting a hefty boost from its half-interest in the meteor blockbuster *Deep Impact*. In television, the studio stands to make upwards $300 million through another Paramount deal to syndicate its ABC hit, *Spi City*. As with any Hollywood studio, the future i a crap shoot. Budgets ar skyrocketing, and compet tion has never been more intense. Katzenberg is ra ing to release the compu er-generated insect tale *Antz* on Oct. 2, six week ahead of Disney's *A Bug Life*, for instance.

DreamWorks is not ye out of the woods. Except for its one hit show, the television unit under Katzenberg has been a disappointment. And plans to construct a huge, state-of-the-art stud near Los Angeles International Air port are only now getting under w after years of legal and environme tal obstacles. Still, investors don't seem concerned. "If they'd sell me more, I'd buy it in an instant," say billionaire Paul Allen, who owns 18.5%. Spielberg insists he's happy and in for the long haul. A good thing, too: Spielberg is DreamWorl most valuable asset.

By Ronald Grover in Los Ange

Lots of companies have a mission statement. How many have a mission?

Our mission? Create better ways to reach out and help make sure people get the health care they need. We are not newcomers to this goal. ▪ In fact, we've already committed more than 160 million dollars towards initiatives specifically designed to build access, not walls. One example is USQA®, the national database we use to identify people who need access to special care. And to remind members to see their physicians for critical check-ups and screenings. We've also teamed with Johns Hopkins to create InteliHealth, the most comprehensive online consumer health information network. Another investment yielded the Academic Medicine and Managed Care Forum. Through it we've funded research to improve access to care. ▪ And we've joined with the American Heart Association in warning women about the number one threat to their health—heart disease. Simply said, we're putting our money firmly where our mission is. That's the price of entry for having one to begin with. ▪ For our brochure on how we are raising the quality of health care, contact us at 1-800-AETNA-42 or our Quality Center at www.aetnaushc.com.

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LOBBYISTS

GOT A PROBLEM? DR. ICKES IS IN

The liberal tough guy sets up shop–and what a client list

It's a busy night at Kinkead's, a chic Washington eatery, and Harold Ickes is starting to relax as only he can: He's staring intently at his dinner roll as he tears it into ever-smaller pieces. For a moment, it seems just like old times. Christopher Dodd, the garrulous Connecticut senator who until recently headed the Democratic National Committee, stops by to chat. Diners crane for a look at Ickes, an intense, blade-thin man hunched in a booth, and realize that he's somebody—even if they can't quite say who.

Well, he is, and he isn't. There's no question that Ickes used to be somebody high in the capital firmament. As White House deputy chief of staff, he was Bill and Hillary Clinton's shredder. His job: doing unto political foes exactly what he has done to his dinner roll. An architect of the President's '96 reelection campaign, Ickes helped put together the money machine that chewed up Bob Dole. To feed the beast, campaign-finance laws were stretched to the limit and perhaps beyond—a feat for which Ickes makes no apologies.

CHUTZPAH. Then Donorgate exploded, and Ickes found himself expendable. "Harold was seen as someone who is toxic," says friend and fellow White House confidante Susan Thomases. Just days after the Clinton landslide, he was dumped by new staff chief Erskine B. Bowles. Ickes walked out with 50 boxes of documents—some of which he turned over to Republican investigators—and hasn't looked back.

Now, he's Harold M. Ickes Esq., would-be power lobbyist. He has opened a Washington office for his old New York law firm, Meyer, Suozzi, English & Klein. And teaming up with longtime aide Janice Enright, he has launched the Ickes & Enright Group, consulting for clients from unions to chemical companies. The tab? Anywhere from $10,000 to $20,000 a month. "Harold's bad-guy reputation actually works for him," says Democratic lobbyist and ex-White House aide Steve Ricchetti. "His appeal is as someone who's both connected and tough."

Still, Ickes Inc. is an act of considerable chutzpah. His list of nonfans starts with Bowles, a starchy, time-chart-obsessed investment banker who couldn't abide Ickes' tantrums, profanity, or back channel to the Oval Office. "Erskine threatened by Harold," says a for White House official.

Then there are the foes, Democ and Republicans alike, whom Ickes trampled in the mosh pit of polit combat. "Harold is smart, tough, meticulous," sighs one senior Clinton ficial. "But he just can't help him from rolling over people."

Finally, there are Republican Do gate probers who suspect Ickes i the center of all manner of dark spiracies. "Ickes is the modern- equivalent of Nixon's plumber," s conservative legal gadfly Larry K man, whose nonstop depositions sheaf of anti-Clinton lawsuits are reason Ickes has run up a $300,000 bill. "He knows more about how Administration operates, legally an legally, than any other living perso

FRIENDSHIP. Despite the controver swirling around him (page 106), Ick loath to quit Washington. Rather t slinking back to Manhattan, he dec to build a business on the unst premise of his continuing friendship the Clintons—if not all their mini (The link was underscored when, th deep in the Monica Lewinsky sca the Prez called Ickes in Californi seek help with damage control.)

"We had to do something," says right. "We were basically chased o the White House." Adds Ickes, who stopped torturing his dinner and is sipping a cranberry juice and vodk was out of politics. I know a lot of ple in town and know how the p works. I thought: 'That's got to be able to some people.'"

Apparently, Ickes figured right. I ing on past ties as a labor lawye has a core of unions and New Y based groups as clients. They in the American Federation of Teac Service Employees' Internat Union, and its powerful affiliate, 1199 of the hospital workers' union. es has pipes into the AFL-CIO and h with the campaign to defeat Calif Proposition 226—which would curbed political donations by u Now, he is trying to talk labor

ICKES AND ENRIGHT: LURING UNIONS AND PESTICIDE MAKERS

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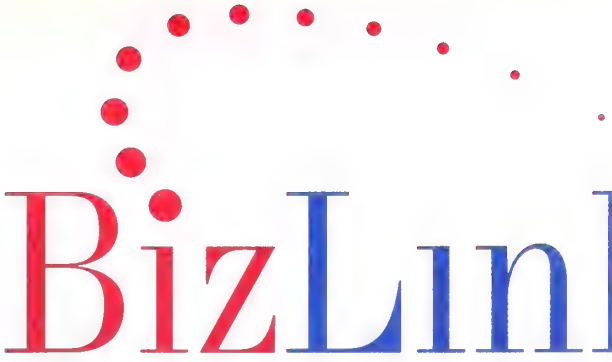

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29 Rockwell Corporation
30 SAS Institute, Inc.
31 Siemens Telecom Networks
32 Sprint
33 The Timken Comapny
34 Trend Microsystems

John J. Sweeney into letting him represent the AFL-CIO. "I expect we'll cut a deal soon," says Ickes.

Other clients include the New York City Council, a gift from upwardly mobile Council Speaker Peter Vallone. Ickes is an unpaid adviser to Vallone's campaign for the Democratic gubernatorial nomination. He also counsels the Greater New York Hospital Assn. on ways to live with new Medicare reimbursement caps and does some work for the Democratic Governors' Assn.

Ickes' most lucrative client is the Commonwealth of Puerto Rico, which retains him to run interference with the departments of Labor and Health & Human Services. Ickes' pals are sprinkled throughout both agencies. And he's advising Governor Pedro Rossello on the battle for statehood.

Although his liberal views were shaped by his early days in West Side Manhattan politics, Ickes knows that no lobbyist worth his Guccis can survive solely on a progressive client list. So he's angling for business clients, too. And some of the ones he's snagging could surprise his friends on the left.

For instance, Ickes works for the Coalition for Asbestos Resolution. It consists of companies—among them GAF, Georgia-Pacific, Kaiser Aluminum, and U.S. Gypsum—that want protection from potentially huge worker-health claims. It is backing legislation by Representative Henry Hyde (R-Ill.) that would set up a trust fund for payouts and establish an arbitration procedure.

Then there's the Alliance for a Fair Tobacco Settlement. Made up of outfits including Owens-Corning, Owens-Illinois, W. R. Grace, and the Johns Manville Trust, AFFTS hired Ickes and former White House legislative affairs chief Patrick Griffin to help tap the proposed Senate tobacco settlement for up to $25 billion. The money was to go to asbestos-exposed workers who also smoke, a combination Ickes says vastly increases the odds an employer will be hit with an asbestos health claim. The collapse of the tobacco bill has frozen the effort for now.

"HE'LL DO FINE." Ickes & Enright also has been retained by the American Crop Protection Assn., which represents pesticide makers. Members include Dow Chemical, DuPont, and American Home Products. "Companies want to sell all the chemicals they can sell," Ickes says. "They worry that a new pesticide law passed in 1996 is so broad that the Environmental Protection Agency is going to run wild."

Is this the same Ickes who worked for Jesse Jackson's 1988 Presidential campaign, railed against the rightward lurches of former White House Svengali Dick Morris, and called Clinton's decision to back welfare reform a mistake? Yep. But Ickes isn't upset by the incongruity. "Most lobbying issues are decided on the merits," he says. "But business operates on paranoia. This fear leads to a thirst for information—and with my contacts, I can supply it."

Can Ickes, the former political headbanger, make a go of it as a silken Washington lobbyist? Why not, say chums. "He'll do fine living off his Rolodex," says fellow Democratic lobbyist Michael Berman. "As for Harold being out of politics, forget it. If Al Gore suddenly finds himself in trouble two years from now in New York, who do you think he's going to call?"

By Lee Walczak in Washington

THE ICKES FILES

White House controversies keep dogging Ickes

CAMPAIGN CONSPIRACY A Justice Dept. task force wants to know if Ickes and other top Clinton aides evaded federal spending limits in the '96 Presidential campaign by funneling some $35 million to state Democratic parties. The cash was controlled by the Democratic National Committee, which was largely controlled by Ickes. He claims his actions were legal.

INDIAN CASINOS An independent counsel is investigating whether '96 campaign contributions from one Indian tribe led Ickes to pressure Interior Secretary Bruce Babbitt to turn down a rival tribe's application for a gambling license. Ickes says he was misinterpreted and denies any impropriety.

TEAMSTERS CORRUPTION As White House political gatekeeper, Ickes granted numerous favors to embattled Teamsters President Ron Carey. A House subcommittee is looking into whether he interceded with Labor Dept. officials and the U.S. Trade Rep in exchange for contributions from the union. Ickes denies any linkage.

FEATS OF KLAYMAN Conservative gadfly Larry Klayman of Judicial Watch is hounding Ickes over his role in the Filegate affair and has forced him to testify under oath. Ickes shrugs off allegations that he was involved in any decision to review private FBI files.

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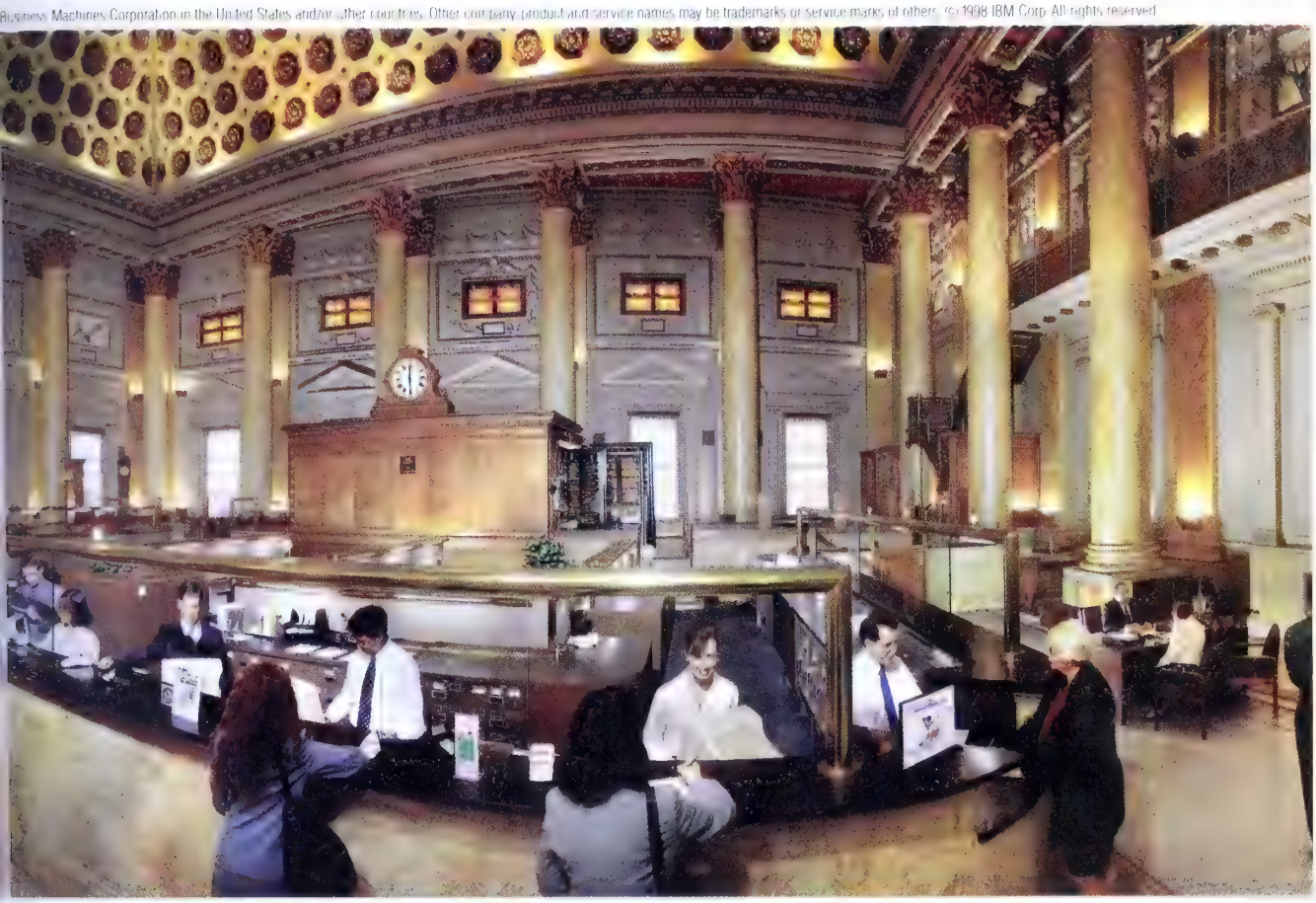

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EXECUTIVE SURVEY

AN OUTBREAK OF OPTIMISM

U.S. execs brim with confidence, despite the Asian fallout

For five years, BUSINESS WEEK has asked corporate executives to ruminate on the economy and their companies' prospects. And for five years, without fail, they've shouted back something like...

"Sensational!" That's Alan C. Greenberg raving. The chairman of Bear, Stearns Cos. is as bullish as they come—but he's not so different from the norm. Since the BUSINESS WEEK/Harris Executive Outlook poll first appeared in 1993, at the start of the current expansion, America's business leaders have demonstrated unwavering faith in the perpetuation of economic nirvana—simultaneous steady growth, low inflation, and full employment.

Executives today appear more fervently optimistic than ever. On average, they estimate that their companies' revenues will jump 10.7% over the next 12 months. Profits? Up 12.3%, they say, a gain that would eclipse the 9.4% pace set in 1997. Some 62% say their hiring will go up—at an average rate of 4.1%—and 74% think investment will increase—at 7.1%. Both are at the highest levels since our survey began. Respondents applaud not just Federal Reserve Board Chairman Alan Greenspan's performance, but President Bill Clinton's as well.

"BUMPS AND NOISES." Great expectations extend across the manufacturing and service sectors and across regions. Within 30 miles of Evansville, Ind., for example, Old National Bancorp President Ronald B. Lankford can find a Toyota pickup truck assembly plant just about to open, an AK Steel finishing factory in the works, and a corn processing plant under construction. Retail demand is vibrant, and labor is tight. "When you go to shopping centers, the first thing you see is 'Help Wanted' signs," Lankford notes.

That said, a few fissures are starting to appear in execs' confidence. Some 38% of respondents now expect gross domestic product growth to decline. "I'm seeing enough bumps and noises to think that 'very optimistic' may be too optimistic," says J. Scott Edwards, executive vice-president of CCB Financial Corp., a bank holding company in Durham, N. C.

One thing worrying Edwards and others is the ominously widening strike at General Motors Corp., which, as of June 30, had idled 172,000 GM workers nationwide. Executives also fret increasingly about labor shortages. "The single thing I see that might cause the economy to slow down might be the availability of skilled workers," says James M. Zinn, CFO of Capital One Financial Corp. The credit-card issuer intends to add 2,000 workers this year to its base of 6,000, but it faces local markets with 4% to 5% unemployment rates.

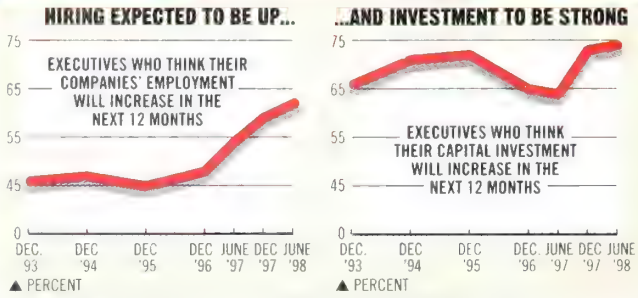
OVERSEAS SEARCH. For the most part, the labor crunch hasn't yet translated into higher wages. Executives say their payroll should rise by just 3.8% over the next year. For many technical jobs, though, salaries are soaring. Software maker Evidence Design Systems Inc., which expects employment to jump 25%, increasingly is going overseas in search of cheaper labor, says CEO Jack Hardin. It just broke ground on a 60-acre campus in Scotland that will employ 2,000.

Then there's Asia. "I think there's a bigger impact from the economic situation there than people have seen or are willing to see," says Carl W. Neun, CFO at Tektronix Inc. The high-tech equipment maker's Asian business is down 20%. Likewise, managers elsewhere have tempered their expectations for overseas revenues this year; only 29% think exports overall will increase, down from 55% who said so a year ago.

At the same time, though, most see an upside to the region's troubles. For one thing, argues TRW Inc. President Peter S. Hellman, "any reduction in exports should be more than offset by an increase in domestic consumption," which is helping to stave off inflation. Executives' cheer, in other words, won't easily be talked off. "When you look at the statistics, it's hard to argue," says SunAmerica Inc. Chairman Jay S. Wintrob. These bulls just won't quit running.

By Keith H. Hammonds in New York

RAGING BULLISHNESS



DATA: BUSINESS WEEK / HARRIS POLL OF 308 SENIOR EXECUTIVES CONDUCTED MAY 27 TO JUNE 5, 1998

POLLYANNA NATION

ONFIDENCE GAME

verall, how would you characterize your outlook for the U.S. conomy in the next 12 months?

	JUNE 1998	DEC. 1997	JUNE 1997	DEC. 1996	DEC. 1995	DEC. 1994	DEC. 1993
ery optimistic	17%	23%	19%	13%	8%	13%	3%
mewhat optimistic	78%	73%	77%	80%	79%	76%	80%
mewhat pessimistic	5%	4%	3%	7%	13%	11%	16%
ery pessimistic	0%	0%	1%	0%	0%	0%	1%

.OWER GROWTH

mpared with the last 12 months, do you think the rate of owth of the gross domestic product will...

	JUNE 1998	DEC. 1997	JUNE 1997	DEC. 1996	DEC. 1995	DEC. 1994	DEC. 1993
up	16%	27%	27%	27%	30%	38%	25%
down	38%	29%	21%	18%	25%	26%	9%
ay the same	46%	44%	52%	55%	45%	36%	66%

IGILE INFLATION

mpared with the last 12 months, do you think the rate of lation, based on the CPI, will...

	JUNE 1998	DEC. 1997	JUNE 1997	DEC. 1996	DEC. 1995	DEC. 1994	DEC. 1993
up	29%	25%	37%	31%	12%	53%	40%
down	6%	13%	5%	5%	15%	6%	5%
ay the same	65%	62%	58%	63%	73%	40%	55%
n't know	0%	0%	0%	1%	0%	1%	0%

LP WANTED

mpared with the last 12 months, do you think the employment rate will...

	JUNE 1998	DEC. 1997	JUNE 1997	DEC. 1996	DEC. 1995	DEC. 1994	DEC. 1993
up	30%	27%	23%	28%	35%	17%	21%
down	12%	15%	20%	19%	15%	33%	34%
ay the same	58%	58%	57%	53%	50%	50%	45%

ING AT FULL THROTTLE

l now some questions about your expectations for your company r the next 12 months. Do you think each of the following will rease or decrease between now and December, 1998?

	INCREASE	DECREASE	STAY SAME	DON'T KNOW	AVG. NET INCREASE
-TIME EMPLOYEES					
98 (June)	62%	19%	18%	1%	4.1%
97 (Dec.)	59%	25%	14%	2%	2.6%
STMENT IN PLANT AND EQUIPMENT					
98 (June)	74%	11%	11%	4%	7.1%
97 (Dec.)	73%	13%	10%	4%	6.2%
IRTS					
98 (June)	29%	29%	9%	33%	2.4%
97 (Dec.)	43%	22%	6%	29%	4.8%
E AND SALARY RATES					
98 (June)	94%	1%	5%	0%	3.8%
97 (Dec.)	95%	1%	2%	2%	3.6%
ROFITS					
98 (June)	82%	9%	5%	4%	12.3%
97 (Dec.)	85%	9%	4%	2%	10.1%

KUDOS FOR GREENSPAN...

How would you rate the job Alan Greenspan and the Federal Reserve are doing?

	JUNE 1998	DEC. 1997	JUNE 1997	DEC. 1996	DEC. 1995	DEC. 1994
Excellent	68%	64%	39%	50%	40%	16%
Pretty good	30%	33%	51%	44%	52%	50%
Only fair	2%	2%	8%	4%	8%	29%
Poor	0%	0%	1%	0%	0%	5%
Don't know	0%	1%	1%	2%	0%	0%

...AND FOR CLINTON

How do you rate President Clinton's handling of the economy?

	JUNE 1998	DEC. 1997	JUNE 1997	DEC. 1996	DEC. 1995
Excellent	12%	8%	4%	5%	3%
Pretty good	48%	43%	43%	40%	34%
Only fair	30%	41%	43%	41%	50%
Poor	6%	6%	9%	10%	12%
Don't know	4%	2%	1%	4%	1%

WHO'S AFRAID OF THE EURO?

What impact, if any, do you think the consolidation of European currencies into the euro will have on your business?

Strong positive impact	4%	Somewhat negative impact	5%
Somewhat positive impact	29%	Strong negative impact	0%
No impact	60%	Don't know	2%

ASIAN CONTAGION

What impact, if any, do you expect the continuing political and economic instability in Asia will have on your business?

Strong positive impact	0%	Somewhat negative impact	52%
Somewhat positive impact	7%	Strong negative impact	4%
No impact	36%	Don't know	1%

MERGER MANAGEMENT

Which of the following statements most closely reflects your opinion of government oversight of mergers between companies?

The government too easily approves most mergers	9%
The government too often opposes mergers	24%
Government regulation of mergers is about right	66%
Don't know	1%

TELECOM LIBBERS

Do you think Congress should pass legislation that would deregulate the telecommunications industry in a way that would allow more competition in local phone service, or not?

Should pass legislation	71%
Should not pass legislation	24%
Don't know	5%

Survey of 308 senior executives at large public corporations, conducted May 27 to June 5, 1998, for BUSINESS WEEK by Louis Harris & Associates Inc. For complete results go to: www.businessweek.com or America Online, Keyword: BW

THE SEVENTH ANNUAL BUSINESS WEEK FORUM

CFO Chief Financial Officer

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Business Week's seventh annual CFOs-only retreat drew nearly a hun senior executives to Phoenix this spring, and discussion was as wide ranging as today's top finance job its Attendees debated the CFO's evolving role in corporate governance, the management of mergers, the prol of planning ahead in a global economy that refuses to run by the old rules, and many other topics — so far afield from finance. This year, the CFOs were joined for the first time by representatives of key exte constituencies, including a leading member of the tort bar and a top portfolio manager who personifies Wall Street's ever-more-demanding expectations. Here are some highlights from an exhilarating three da

Do CFOs Have Too Many Options?

The booming stock market is good news, but it's bringing a new kind of stress to the job of CFO. Consider the plight of Microsoft's CFO **Gregory B. Maffei**. Twenty-one thousand of the company's 24,000 employees now hold stock options. Microsoft's commitment to options for all has been widely praised. "Microsoft cares a lot about our ability to employ and retain people," says Maffei, "but this is turning into a dangerous situation. It would eat up a full year's earnings to cover our annual options exposure. Our total options overhang is downright scary: five hundred million options outstanding with a current market price of roughly $90, and an average exercise price of about $20. That is $35 billion of in-the-money value. It is a real concern over time, no question."

Others outside of Microsoft share the same concern. One of the nation's most successful portfolio managers, **Howard F. Ward** of The Gabelli Growth Fund told the CFOs, "I for one am still trying to understand what's going to happen to the liability that Microsoft faces when their option runs out of steam. If anybody has that figured out," said Ward, "I'd like to know."

Stock options are top of mind for many chief financial officers as well as for a growing number of shareholders who are concerned about CEOs and other senior executives carting off company wealth in their enormous pay packages. "I have nothing against people getting rich nor do any of my colleagues at CREF," says **B. Kenneth West**, former chairman of Harris Bankcorp and now senior consultant on corporate governance for TIAA-CREF, the nation's largest pension fund. "We want them to get rich if the company is successful. But mediocre company performance in a rising stock market is being rewarded handsomely and that should not be."

"How are these CEOs being evaluated?" asks Ward. "If the standard among companies has become 'what can we get away with' instead of 'what is fair and appropriate' then America's love affair with the stock market is on borrowed time." Ward praises the recent performance of corporate America, but says he believes there are CEOs receiving $10 million pay packages who would stay in their jobs for $15 million, and that "it is up to corp management to figure out how to deal with th Twenty percent of the CFOs attending the Business Week Forum admitted that although t boss' pay is too high, they will not try to do anyt about it because their CEO would be displease (See *CFO Poll.*)

"Our total options overhang is downright scary. It is a real concern over time, no question."

Gregory B. Maffe vice-president, finan and chief financial of Microsoft Corporat

"As business people, our uncertainties are reaching well beyond the boundaries of commerce."

Dana G. Mead chairman of the board and chief executive officer, Tenneco Inc.

BusinessWeek EXECUTIVE PROGRAMS

o Afflict The Comfortable

he quality of public company accounting in erica has deteriorated very significantly in recent rs," declares attorney **William S. Lerach**, and that has meant opportunity for Lerach's famously wealthy law firm, Milberg Weiss Bershad Hynes & Lerach LLP, the leading filers of class-action lawsuits against corporations. "My lot in life is to afflict the comfortable," says Lerach (pronounced LEER-rack), and afflict them he does, filing over 100 "Lerachings," the ubiquitous lawsuits that have come to be identified with him personally. Lerach told CFOs at the Business Week Forum that "compensation programs frequently tie bonuses to earnings targets, and we all know that human beings change their behavior in reaction to changed incentives."

The quality of counting has eteriorated gnificantly due the extreme essure on mpanies to ow earnings owth."

illiam S. Lerach
tner,
berg Weiss Bershad
nes & Lerach LLP

When senior company utives ask their chief financial officer to misrepnt corporate results, how do CFOs respond? -five percent of the CFOs confirmed they have ved such requests and have fought them off. ther 33% of those at the Forum reported they never been asked to fiddle with the numbers. remaining 12%, responding anonymously, itted that they have yielded to such requests, and have misrepresented corporate financial results.

sion Between the ard and the CFO

rney **Gary Lynch** of Davis Polk & Wardwell, ormer head of enforcement for the U.S. rities and Exchange Commission questioned rend toward more and more CFOs sitting on company's board of directors. While the SEC ot brought any action specifically delineating the CFO should interact with the board, h says that "if you took a poll around the , they would say that there should be a tension een the board and the CFO such that the l feels no compunction at all about pushing on the CFO for answers to the board mem- tough questions."

Robert Hershey
national partner-in-charge,
World-Class Finance,
KPMG Consulting

You're Lean & Mean. Now Lead.

For years, most CFOs had been focused on "taking out the cost, which was the right place to start," says **Robert Hershey**, national partner-in-charge, World-Class Finance practice, KPMG Consulting. "CFOs have succeeded in making their companies lean and mean. Now they need to bulk up the muscle by developing measurements, monitoring performance, and motivating the company to continue the drive for revenue growth. By redefining the process of performance management CFOs move beyond cost-cutting and start using their departments to increase the top-line. That's why the job of CFO is gaining so much prominence. It is the best spot in the company to make things happen."

The Millennium Bug: More Than Computers

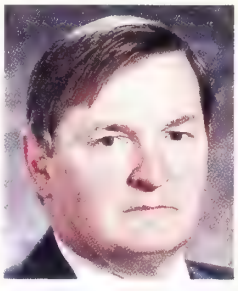
The "Year 2000" computer glitch surfaced just as large numbers of CFOs assumed responsibility for their companies' information systems. At first it was seen as a mere technical problem, hardly a matter for the attention of senior management. Today every CFO knows that the millennium bug jeopardizes mission-critical aspects of most large enterprises. In many firms it is the CFO who is at the helm of multi-million dollar efforts to rid their company of the "Y2K" problem in time.

Frank J. Borelli
senior vice-president and
chief financial officer,
Marsh & McLennan
Companies, Inc.

At Marsh & McLennan Companies, Inc., CFO **Frank J. Borelli** says, "The audit committee of the corporate board of directors must take a strong leadership role. We rated the different units and those that were not up to par were summoned to an audit committee meeting and asked for a report and then follow-up reports. That gets attention."

Attorney **Claude Stern**, partner in the Silicon Valley law firm Fenwick & West, warned that "every CFO in this room is with a company that sells services or products that are very likely not Year 2000-compliant, and simultaneously each of your companies is reliant on the products or services of other companies that are similarly non-compliant. Everybody," says Stern, "is a potential Y2K perpetrator as well as a Y2K victim."

"A Y2K victim is exactly what we will not be and what we will not allow our customers to be," vows Gateway CFO **David McKittrick**. "Perhaps we have a bit of an edge as an IT company, but like every other firm, Gateway is investing significant amounts of time, effort, and dollars to ensure that both we and our customers experience the smoothest possible transition. It's the right thing to do for a lot of reasons," says McKittrick. "If the population as a whole becomes unduly frightened by system failures related to the turn of the millennium, that fear could present itself as share market volatility. This country has too much invested to allow that. Every company has a responsibility to ensure that their systems continue working as usual – regardless of the date on the calendar."



David McKittrick
senior vice-president,
chief financial officer
and treasurer,
Gateway

The 7th Annual Business Week Forum of Chief Financial Officers

"If you don't have a strong and effective CEO, as the CFO you will be ramming your head against the wall."

J. Michael Losh
executive vice-president and chief financial officer, General Motors Corporation

Reflecting the view of many CFOs, **Eugene P. Beard**, chief financial officer of Interpublic Group of Companies, says, "Every CFO should either be a member of their company's board of directors or at the very least attend all the board meetings. Many CFOs' role in their company virtually demands that they have a seat on the board," says Beard. "They are their company's primary point of contact with shareholders." Beard has been a member of Interpublic's board for 18 of his 19 years with the firm, but his case is almost an exception: Only 22% of the CFOs attending the Forum sit on their company's board. While fully 90% of the CFOs do attend their company's board meetings, more than half of those who are not on their company's board find that that is not enough: They believe they should be board members.

The CFO/CEO Team

The rapidly-changing role of the financial leader in the corporate hierarchy is a topic of endless interest to CFOs. The chief financial officer's role on the senior management team has surged in recent years. General Motors executive vice-president and CFO **J. Michael Losh** is a case in point. But Losh emphasizes that the CFO cannot stand alone. "You need a great CEO to work for," says Losh, "and at GM we have that today in Jack Smith. General Motors has had some great CEOs, and we have had some that frankly did not measure up. If you don't have a strong and effective CEO, as the CFO you will be ramming your head against the wall and as a general rule, it's probably not worth it. Of course," says Losh, "there are some exceptions to that rule: look at the CEO in the White House; you may question his personal style, but we have a remarkable chief financial officer in Alan Greenspan – a CFO who is the most powerful and influential individual in the world."

"Things that you thought would never change can change tomorrow."

Hon. Bill Bradley
vice-chairman, international council, J.P. Morgan & Company; U.S. Senator, (D-N.J., 1979-1986)

Uncertainties That Change Rapidly

One of the most significant challenges confronting today's CFO is the immense uncertainty and unpredictability of the business future. "Who could have predicted the changes of the past ten years?" asks former U.S. Senator **Bill Bradley**, now vice-chairman, international council of J.P. Morgan & Company. "Political change alone has increased the world market by two billion persons, and the interdependence of world financial markets mean that poor banking regulation in Thailand can precipitate a 500-point one-day drop in the stock market in New York." For CFOs trying to manage the financial future of their companies, says Bradley, "it is mind boggling. Things that you thought would never change can change tomorrow."

"The political sphere and the financial and capital markets are all in remarkable flux. So are all the markets we all sell our goods and services into," says **Tobey J. Russ**, president of AIG Risk Finance. "Political risk coverage for Uzbekistan, financial market risk coverage inside an insurance policy, securitized insurance risk in the capital markets, a new asset class

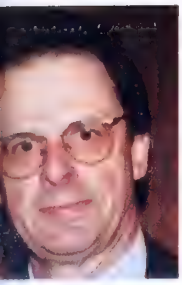
"The political sphere and the financial and capital markets are all in remarkable flux."

Tobey J. Russ
president, AIG Risk Finance

CFOs Sitting On The Cusp Of Knowledge

Dr. James H. Goodnight
president and chief executive officer, SAS Institute Inc.

"The CFOs of 'learning' organizations use every bit of financial, economic, and market information that exists in their company to make their business work better internally and compete better internationally," says **James H. Goodnight**, president and chief executive officer of SAS Institute Inc. "CFOs of non-learning organizations usually have as much corporate wisdom around, but they are stuck on the cusp of knowledge: Knee-deep in data rich with potential, but unable to transform their corporate knowledge into sustainable competitive advantage. Technologies like data warehousing and data mining enable CFOs to get to their data and turn it first into information, and then into the knowledge that will let everyone in the company see more, learn more, and make better decisions."



dgment is ore critical cause the emost mponent of npetitiveness ay is speed."

Vilson Lowery, Jr.
man,
Credit Corporation;
al manager,
Global Financing

such as underwriting risk: These did not exist ten years ago, and what's more, if you had proposed such ideas, people would have wondered what planet you were from. Yet, less than a decade later these are the new products that we have been forced to create. No surprise," says Russ, "as CFOs seek to mitigate the risk that flows from engulfing change."

"CFO judgment is more valuable than ever," says **W. Wilson Lowery, Jr.**, chairman of IBM Credit Corporation. "Judgment is more critical because the foremost component of competitiveness today is speed. All the change, everywhere world is known to you, your customers, and ompetitors instantaneously and universally. So O you must be able to receive information and executive judgments just as fast." Lowery adds is up to senior management to ensure that ompany's culture keeps pace with the changing ss environment. "Transforming your culture transforming your people," says Lowery, hat is the most difficult challenge of all."

"As business people, our uncertainties are reaching well beyond the boundaries of commerce," says **Dana G. Mead**, chairman of the board and chief executive officer of Tenneco Inc. "We are at the beginning of a new 'commercial century.' The 19th century was geopolitical, focused on expansion, colonization. The 20th century was political and military, characterized by the great wars, the redrawing of boundaries. The next century may well be shaped more by the dynamics of international commerce, and that is going to change the nature, the scope, and the pace of the uncertainties that CFOs and all business people will have to address."

CFOs of large corporations are eligible to participate at THE ANNUAL BUSINESS WEEK FORUM OF CHIEF FINANCIAL OFFICERS. *The 1999 gathering will occur March 10-12 at The Phoenician Hotel in Scottsdale, Arizona. For more information, call Business Week Executive Programs at 212-512-2184.*

***Listen in on this year's meeting** and learn more about the Forum of CFOs and other Business Week events at http://execprog.businessweek.com/cfo98*

BusinessWeek
EXECUTIVE PROGRAMS

EN GIANTS MERGE

ansformation is occurring in the financial institutions sector with major cations for CFOs and CEOs," says **Robert L. Collett**, president and executive officer of actuaries and consultants Milliman & Robertson, Inc. Citicorp/Travelers deal illustrates dramatically how the lines are blurring. y soon be hard to tell the difference between banks, insurance companies, nvestment firms."

tt has had a front-row seat for the big mergers: financial forecasts done illiman & Robertson have played a major role in enabling a number of ecent consolidations. Collett is convinced that "these transactions can ccessful in the long term for both shareholders and customers, thanks to cost-effective distribution channels." But he adds that "while these new es will offer a broader range of services, the commercial consumer has to er about the long-term implications: Will competition ultimately increase crease as a result? Will these giants be able to absorb their organizational es and still maintain a focus on the customer?"

Robert L. Collett
president and
chief executive officer,
Milliman & Robertson,
Inc.; chairman,
Woodrow Milliman

The 7th Annual Business Week Forum of Chief Financial Officers

CFO POLL

Results of anonymous polling of 160 delegates at THE SEVENTH ANNUAL BUSINESS WEEK FORUM OF CHIEF FINANCIAL OFFICERS. Each had access to a keypad and was able to answer each of the 25 questions asked during the Forum. See the full set of responses at the BUSINESS WEEK website: http://execprog.businessweek.com/cfo98

As CFO I have fought off other executives' requests that I misrepresent corporate results

Yes; I fought them off:	55%
Have never received such a request:	33%
I yielded to the requests:	12%

CFOs should act to 'bring more rationality' to CEO compensation

Yes, and I am already acting on this:	3%
Yes, and I will act on this in future:	10%
CEO pay is too high at my firm, but the CEO would be unhappy if I stepped in:	20%
CEO is not overpaid at my company:	67%

Will the 'Year 2000 non-compliant' software at your company be rewritten in time?

Yes:	70%
No:	7%
Maybe:	23%

1998-2000: Odds of a Recession

1% chance:	7%
10% chance:	24%
25% chance:	33%
50-50 chance:	25%
75% chance:	10%
Almost certain:	4%

In-hall polling provided by Meridia, Plymouth Meeting, PA

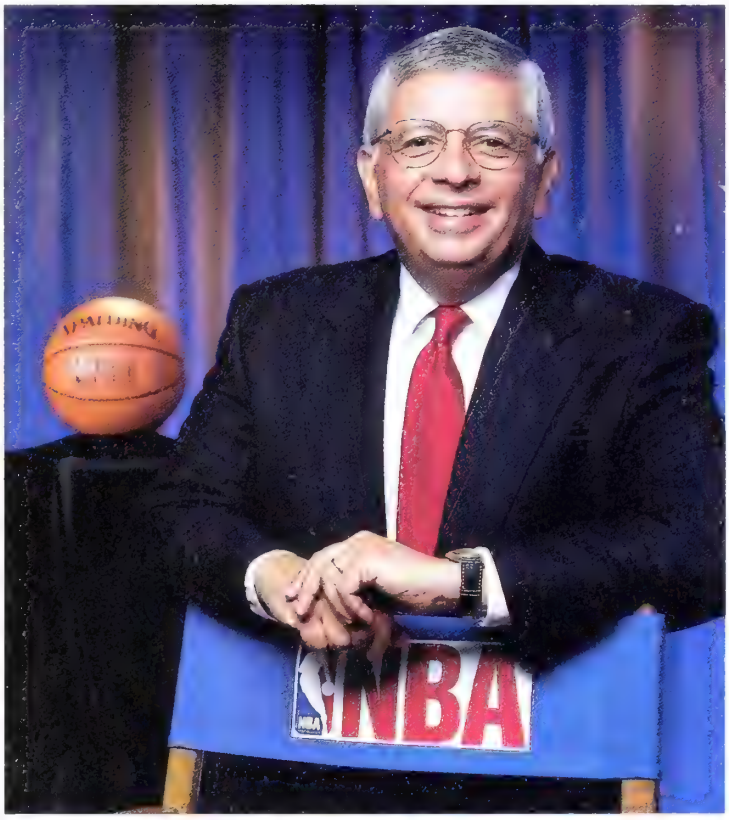
BASKETBALL

DAVID STERN: THIS TIME, IT'S PERSONAL

At stake: Not just the health of the NBA and the 1998-99 season but his legacy

If every aspiring athlete wants to "be like Mike," every budding sports-business executive wants to be like Dave. Named commissioner of the National Basketball Assn. in 1984, the year Michael Jordan entered the league, David J. Stern transformed the NBA from a dissolute, money-losing franchise into one of the premier brands in global entertainment. Now Stern, 56, must save it from an altogether more pernicious force: greed.

On June 30, NBA team owners locked out the players for the third time since 1995 after several months of fruitless negotiations over a new labor contract. During the lockout, teams can neither pay, re-sign, or trade players, nor operate basketball facilities. The immediate effect is limited, since most players have been paid for last season and training camps don't open until September. Unlike the other professional sports leagues, the NBA has never lost a game to lockout or strike. But with both sides talking tougher than ever before, that is one NBA record that might soon fall.



PERPETUAL OPTIMIST: *Stern says the NBA still has room to grow*

"THE BENCHMARK." There were a number of new "player conduct" rules on the table, but the central issue could not be more elementally financial: Owners and players both want to maximize their share of league revenues, which hit a record $1.74 billion for the 1997-8 season. NBC and Turner Sports Inc. recently renewed their four-year contracts for U. S. rights to broadcast NBA games by agreeing to boost their payments to the league by 140%, to $2.65 billion. Buoyed by this fat new TV pact, league revenues are projected to hit $2 billion next season. "I just find it appalling that with all the money the NBA has to spread around that it's come to this," says Robert Williams, president of Burns Sports Celebrity Service Inc., a Chicago-based firm that pairs star athletes and advertisers.

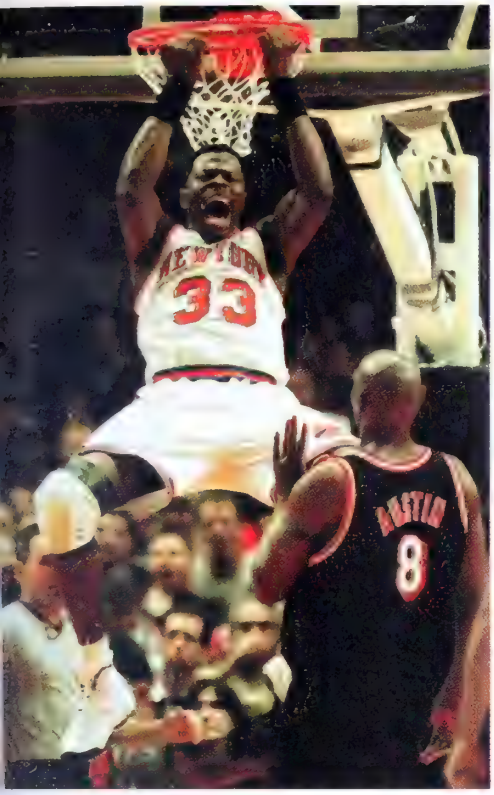
But as any CEO worth his stock options can tell you, a business cannot live by revenues alone. Despite steady revenue growth, the league's operating profit peaked at $195 million in 1992-93 and has been sliding ever since. Last season, the NBA operated at a deficit for the first time since bad old days of the e 1980s, losing $44 milli

The NBA's intram conflict is attracting tense interest throug the pro sports world, for good reason. "D Stern and the NBA still the benchmark what a commissioner a league can do rig says Allen Furst, ma ing director of D&F G Inc., a sports-marke firm in Washington. Stern can't handle this uation, it has got to ry all the leagues."

Although the NBA missioner serves at pleasure of team ow Stern is a famously e getic and strong-w sort who styles himse basketball's "CEO." Th an expression of prin no less than ego, Stern has always ins that the league be ru a business in its right. What could more American? In tice, though, Stern often has bur heads with owners who don't mind sidizing money-losing teams to se larger corporate agenda or, worse, look on basketball as a rich man's h and want to win at any cost.

It's no wonder that the players come to think of team owners as who plead poverty before fishing a million contract out of mysteriously pockets. Last year, Kevin Garnett, year-old phenom, signed a $126 m seven-year contract with the Minn Timberwolves, one of the league's profitable teams. Stern took Glen T the Timberwolves' billionaire own

Before the lockout, Stern secured a fat strike fu



ME THE MONEY: *Patrick Ewing and the debunk the owners' accounting methods*

A SHOE DROPS: *Reebok has dumped Shaq as an endorser*

rivately but was powerless to he deal. "David will always say to u've hired me to be the boss, and it,'" says Taylor, who counts him- Stern admirer. "But it's a different f CEO job, because in other in- s, CEOs are the *real* boss."

AY NO? Stern now wants to force al discipline on team owners by ing the league's labor contract to layer salaries to a fixed percent- total NBA revenues. He has sug- 48% in talks with the union but at the number is negotiable. By nmissioner's analysis, the $1 bil- salary the players were paid last amounted to 57.2% of total revenues and would have risen inous 61% next year under the ontract that the owners voided osing a lockout. "We simply can- on like this," Stern says.

e owners feel threatened by play- y demands, "all they've got to do no," counters Jeffrey Kessler, a ork lawyer who represents the association. Union officials also t the league's claims of wide- financial distress, arguing that ew franchises are actually losing and that the league's real prob- ot runaway player salaries but nt local management.

Stern, a lawyer by training, is known as a master labor negotiator who has done his fair share of posturing over the years. But never before has he publicly argued that the league has become so economically dysfunctional that many teams would be better off financially in the upcoming season if not a single game was played. The lockout frees teams of the obligation to pay their players—far and away management's largest operating cost. Meanwhile, the new TV contract is the first ever requiring broadcasters to make full payment even if there are no games to televise. In effect, Stern secured a strike fund of $475 million (the amount due in the contract's first year), courtesy of NBC and Turner.

On June 30, hours before the lockout went into effect, Stern imposed a league hiring freeze—the first of his tenure as commissioner. At the same time, he told the NBA's 800 employees to brace for "drastic reductions" in discretionary spending, including capital investment in a range of new ventures that Stern sees as crucial to the league's long-term revenue growth prospects.

Stern, the son of a New York deli owner, joined the NBA in 1978 and was the league's second-ranking executive when it hit bottom in 1980-81. The advent of free agency in 1976 had sent salaries spiraling upward even as attendance had dwindled to a pathetic 58% of capacity. It was Stern who saved the day by persuading the players to accept a league proposal to cap their salaries. A landmark contract signed in 1983 set a limit on the salaries teams could pay but guaranteed players that they would receive no less than 53% of revenues from the sale of tickets and domestic broadcast rights.

This management-labor pact undergirded enormous expansion. Attendance soared, handsome arenas were built, and a whole new infrastructure of regional, national, and international broadcasting was assembled. Stern set up NBA Properties Inc. to license the league logo to manufacturers of jerseys, caps, and some 70 other items. The commissioner also founded NBA Entertainment, which began as little more than a game-tape library and evolved into a mini-empire of proprietary multimedia products, including television programming,

iating a TV deal that pays even if no one plays

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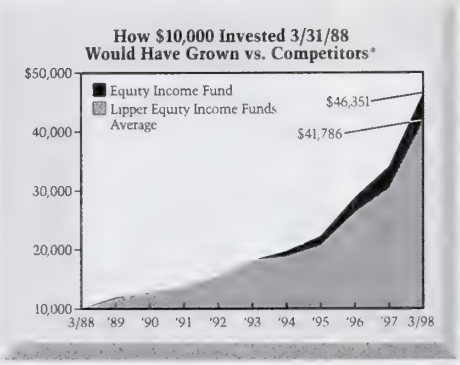

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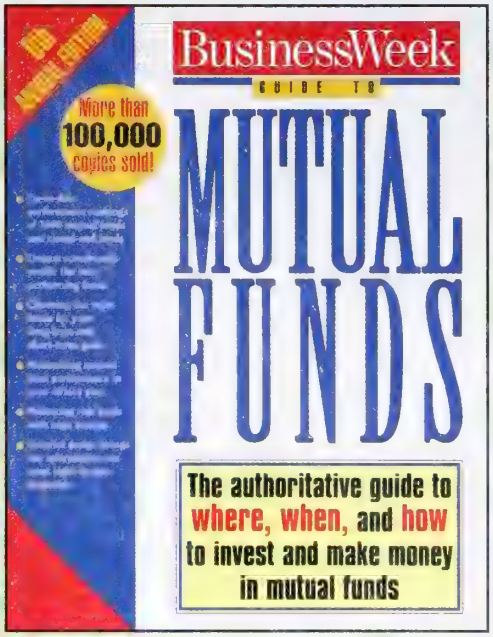
Make the Most of Your Mutual Fund with Invaluable Advice from BusinessWeek



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videos, books, and a Web site (NBA.

But by the time the league and players union sat down to negotiate new contract in 1995, their partnership was coming undone. To the players' annoyance, the league had been slow to cut them in on its growing merchandise and new-media businesses. Meanwhile, the salary cap system was leaky like a colander as owners and player agents exploited loopholes. Chief among them was the "Larry Bird exception." Named after the retired Boston Celtics great, it allowed teams to exceed the cap by any amount to resign a current employee. (Last year, the salary cap was set at $26.9 million, and 23 of the 29 teams exceeded it.)

Stern opened the contract bargaining with a proposal to turn the league's "soft" cap into a hard one by eliminating all loopholes other than the Bird exception. What's more, owners who made use of the Bird exception would have to

> It was Stern who blinked during the 1995 negotiations

pay a prohibitive "luxury tax." To Stern's delight, the union's executive director, an ex-league official named Simon Gourdine, accepted these terms and shook hands on a six-year deal. However, the players refused to ratify the agreement and even attempted to decertify their union.

In the end, it was Stern who blinked, recommending that the owners accept a new contract that preserved most loopholes and scuttled the luxury tax. However, he did wangle one important concession out of the union. If, in three years, the league's player payroll exceeded 51.8% of revenues, management could void the remainder of the contract. The owners exercised this option in March on a 27-2 vote, overruling the complaints of the union, which now is headed by Billy Hunter, a former federal prosecutor who is no stranger to hardball negotiating.

Even before push came to shove at the NBA bargaining table, America's love affair with pro basketball was cooling. The rising incidence of violence, not only the Latrell Sprewell coach-choking episode, has taken much of the sheen off the league's high-gloss image. And after many years of robust growth in

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receipts, average NBA attendance has leveled off in the past three years at slightly more than 17,000 a game.

The sports trading card business—once the NBA's single largest source of licensing fees—has all but imploded, and sales of all league-licensed apparel is stagnant at best. Makers of the glutted market in basketball shoes (page 46) are paring back endorsement deals with NBA players. "The days of signing every single player on a team are over," says John Frascotti, vice-president for global marketing at Reebok International Ltd., which has slashed its roster of NBA endorsement contracts to 40 from 70 over the last year. On June 30, it even parted ways with Los Angeles Laker center Shaquille O'Neal, arguably the league's second-biggest star.

Like many longtime business partners of the NBA, Frascotti fears that the impending breakup of the Chicago Bulls—and the possible retirement of Jordan—will hurt the league across the board. "Core basketball fans will stay with the game," he says, "but those on the fringes, who turned on the TV to watch a dynasty, will lose interest."

Executives of NBC and Turner Sports disagree, of course, and still profess optimism that next season will come off without a hitch. While reluctant to directly criticize the players, their sympathies clearly lie with Stern. "It's easy to take shots at the leader," says Harvey W. Schiller, president of Turner Sports, dismissing union criticism of the commissioner.

BACKUP HELP. Stern concedes that the NBC and Turner contracts are likely to be the league's only major source of revenue growth in the next few years. In the long run, though, Stern sees "enormous potential" in three newly emergent revenue sources: the sale of foreign TV rights, NBA.com, and the Women's National Basketball Assn., the league's new distaff offshoot. Over the past two years alone, Stern has invested $35 million in these ventures, tapping into the league's share of income from merchandise and media sales.

Stern does not want to be the first NBA commissioner to lose a game to a labor disruption. It would sully his own image as well as that of the game. On the other hand, he is, above all, a business builder, whose battle with the union has become personal in the sense that he sees his life's work threatened: "Either we work with the players to restore the financial model on which the league's growth and success was based or NBA basketball becomes, I'm afraid, a bad investment." That is a startling statement coming from the biggest booster pro basketball has ever had.

By Anthony Bianco in New York

INVESTIGATIONS

DUBIOUS DEALINGS BEFORE DREYFUS

The murky past of a fund manager now under FBI scru

On Dec. 12, 1994, the financial news wires reported that Leon G. Cooperman, manager of the prestigious Omega Advisors Inc. hedge fund, had bought a 6.5% stake in a penny stock called Home Theater Products International Inc. To Wall Streeters familiar with Cooperman's high-rolling investment style, Omega's 615,000-share stake in this fly-speck company was a shocker. It wasn't just the size of the company. Skeptics believed that Home Theater was a fraud—an old-fashioned, widely promoted stock scam. And sure enough, three of its top execs later pleaded guilty to securities fraud and insider trading.

Word of the stock's cruddy quality reached Cooperman after the item hit the wires. When the Omega partner who bought the stock was questioned by Cooperman, according to a source familiar with the incident, it was obvious that he hadn't done even elementary research on the company. Cooperman swiftly dumped the shares—overruling his partner, who subsequently left the firm. His name: Michael L. Schonberg. After leaving Omega, he surfaced at an equally tony firm—Dreyfus

This incident would have long forgotten were it not for the contr that has swirled around Schonber Dreyfus in recent weeks. The l Bank Corp. subsidiary has been by questions concerning Schonberg sonal holdings in two other mi stocks he bought for his two D funds—the Aggressive Growth an mier Aggressive Growth funds. A ing to a senior law enforcement Schonberg's activities at Dreyfus a der investigation by the FBI, as by the Securities and Exchange mission and the New York State ney General's Office, which has ju a wave of subpoenas.

The New York probe could be a ularly thorny for Dreyfus. The sta ulators, who have both civil and c jurisdiction, are conducting a wid ing probe that began in Decembe as an investigation into Dreyfus' tising of the two funds. Accordi source close to the probe, the inv tion subsequently broadened to amination of the funds' stock p

Schonberg's involvement in penny-

vhich have included a host of thinly
d penny stocks—and later to en-
ass the allegations of conflict of in-
. Dreyfus declined to comment on
vestigations. Andrew Kandel, head
e Attorney General's office of in-
protection, commented on the gen-
ssue by noting pointedly that mutual
that "choose to dabble in these
speculative and manipulation-prone
ities and market them to Main
investors must make specific pub-
closure and employ the most thor-
supervision of fund managers and
ctivities."

Dreyfus, the incident at Omega
an intriguing question: When it
Schonberg in August, 1995, did
us know that he had left his last
yer in the after-
of the Home The-
asco? Dreyfus did
espond to ques-
on this subject,
only that it
not be "appropri-
to comment on
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ent. And the list
stions is likely to
for Schonberg,
us, and the $23
money-manage-
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orked from 1988
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tint at Omega—
sset Management Inc.

AKE. According to SEC filings com-
y Technimetrics Inc., a New York
hat tracks institutional holdings,
erg bought for UBS a large stake
mpany called American Medical
logies. And that could be trouble-
because he obtained 20,000 unreg-
warrants in that company for his
l account while loading up on the
or UBS in 1992. A 250,000-share
n the company was disclosed in
ept. 30, 1992, filing. That made
largest institutional owner of the
UBS's stake in the stock swiftly
l and grew again during 1993,
at yearend at 785,000. Schon-
as chief investment officer of the
t despite his lofty position, UBS
ng Director George Jamgochian
ed, Schonberg ordered the pur-
of this tiny stock. And a UBS
voman said "there is no indica-
our records whether or not" UBS
rmed of the warrants.
ircumstances in which Schonberg obtained the warrants are far from clear. Officials of American Medical (since renamed Tidel Technologies Inc.) say the shares were transferred to Schonberg by an investment banker at Laidlaw Equities Inc. They declined to name the banker, who they say obtained the shares for free in connection with the spin-off of an American Medical subsidiary. The banker's relationship with Schonberg, if any, was unclear.

According to traders and brokers intimately involved in such stocks, unregistered penny-stock warrants are rarely sold because there is no public market for them. And when they are sold among traders, they sell at a steep discount, often for just a few cents. But according to a letter to BUSINESS WEEK from Christopher M. Condron, Dreyfus' chief executive, Schonberg purchased the warrants late in 1992 at a price of $1.50 per share and the exercise price was $1.25.

It was unclear why Schonberg, or any savvy investor, would pay such an apparently steep price for unregistered warrants that another investor had obtained for nothing. The warrants could not be exercised until American Medical registered them. Leonard L. Carr Jr., the company's senior vice-president, says American didn't know when that would be until yearend 1996, shortly before they were registered. Once registered, the warrants could only be exercised for 60 days after the registration date. In effect, then, they were a wager that shares of this penny stock would climb to $2.75 or higher at some unspecified point in the future. Tidel's chief executive, James T. Rash, says that the company handled the transfer of the warrants to Schonberg but has no evidence of the purchase price. According to Rash, the company has received an inquiry from the New York investigators but not from Dreyfus—which appears to contradict Dreyfus' repeated assertions that it is conducting a "thorough investigation" of allegations regarding Schonberg's personal holdings. Dreyfus did not respond to a request for comment.

Schonberg's purchases of American Medical at UBS may well have enhanced the value of the stock, and thus his warrants. After joining Dreyfus, he loaded up on the shares for the Aggressive Growth fund in early 1996. According to Condron, the fund has since sold out its shares at a profit. Condron says Schonberg exercised the warrants in March, 1997, but has never sold the shares.

The other stock in which Schonberg had a personal stake, while buying the shares for Dreyfus, was Chromatics Color Sciences International Inc. (BW—June 22). And there, too, is a previously undisclosed UBS connection. According to Technimetrics, UBS acquired a 220,000-share stake in Chromatics in the last three months of 1993, making UBS the biggest institutional holder of the stock. Jamgochian confirmed that Schonberg ordered that purchase as well. UBS sold out its position after a few months, at about the time Schonberg left for Omega. In December, 1994, Schonberg obtained cut-rate shares in Chromatics in a private placement.

Was there any connection between Schonberg buying Chromatics stock for UBS and later getting cut-rate shares for himself? Schonberg won't comment. Meanwhile, Dreyfus, while publicly supporting Schonberg, has quietly removed him as a portfolio manager of the two funds but is keeping him on as an "analyst." Dreyfus spokeswoman Patrice M. Kozlowski says that the move was in the works for a while and is unrelated to the controversy over his personal holdings. But in April, Dreyfus had said that while Schonberg was no longer the lead manager, he would stay on as a portfolio manager. Kozlowski declined repeated requests to explain the contradiction. And that's understandable. With all those investigators putting Schonberg and his employer under a microscope, Dreyfus has a lot more serious issues to explain.

By Gary Weiss in New York

THE SCHONBERG AFFAIR: SOME UNANSWERED QUESTIONS

1. THE OMEGA DEPARTURE Did Dreyfus know that Schonberg had left Omega Advisors after Omega repudiated his purchase of a questionable penny stock?

2. THE AMERICAN MEDICAL WARRANTS Was Schonberg's purchase of the stock for UBS Asset Management, and later for Dreyfus, influenced by his position in illiquid warrants?

3. THE CHROMATICS TRADE Was Schonberg's purchase of Chromatics for UBS in any way related to his obtaining cut-rate Chromatics shares several months later?

DATA BUSINESS WEEK

ctions goes back to his days at Omega and UBS

STOCKS

ARE YOU LISTENING, MR. GREENSPAN?

Jeremy Siegel makes a case for high market multiples

The performance is just staggering. In less than four years, the stock market has shot up more than 150%. Yet rather than bask in prosperity's glow, investors seem uneasy. What accounts for the market's lofty valuations—economic fundamentals or irrational behavior?

Like all of us, the Federal Reserve Board wants to know, and for good reason: Any collapse in the stock market is bound to crimp the economy. And there have been calls for the Fed to hike short-term interest rates, not so much to dampen potential inflation as to cool the market. But if Fed governors were swayed by a recent presentation from Wharton economics professor Jeremy J. Siegel, the author of the highly i ential book *Stocks for the Long* the nation's central bank will tur back on that advice.

Every six months, the Fed invit group of luminaries from academia, Street, and the corporate world to cuss economic questions. The latest ference was held on June 15, cove front-burner issues like the Asian nomic crisis and the health of the economy—and Siegel's favorite t stock market valuation. These dis sions can be influential. For insta on Dec. 3, 1996, economists Robe Shiller of Yale University and Joh Campbell of Harvard University ar that investors had driven the stock

BRAVE NEW WORLD

Strong earnings growth, a high-tech payoff, and demand for equity explain today's stock momentum, Siegel says

ket to unsus able heights. days later, Chairman Greenspan ra markets w wide when asked rhetori whether " tional exu ance" was b ing in stocks. "I never used the term tional exuberance,'" says Shiller. "I did say 'irrational.'"

The market shrugged off Greens remarks, rising more than 2,600 points since then. Despite that Siegel maintains that the mark quite rational. True, based on hist benchmarks, the market looks ov ued—perhaps by as much as 25% those benchmarks are suspect now Siegel. "When we say overvalue history, we have to ask, is this p like history?" he says.

QUANTUM LEAP. Conditions are a l ferent now, says Siegel. For one the demand for equity investment taken a quantum leap. Millions of ers setting money aside in retire savings plans have gotten the me that equities are the best-perfo long-term investment. It's a mantr associated with Siegel, especially the publication of his book in 199 another thing, corporate earning less volatile than before as swi the business cycle have moderate time. In addition, with most natio bracing market capitalism, it's h unreasonable for investors to anti higher growth rates at hom abroad.

Still, the core of Siegel's arg rests on how the dynamic force ving the U.S. economy affect the market. In his Fed presentation,

red the top 20 companies of the ard & Poor's 500-stock index in vith the top 20 in 1964, a year in the overall S&P index sold at arnings ratios near those of today . In 1964, the index was domi- by smokestack companies and oil Earnings had grown by an av- of 8% over the previous five-year . Only five of the big companies onsidered growth stocks. harp contrast, the five-year earn- owth rate for 1998's top 20 com- is nearly twice as high—15.2%. e p-e ratio for these companies, only 50% higher than it was in Many of today's com- are leading-edge glob- petitors, and 15 are ered growth stocks. oft Corp. Chairman n H. Gates III was elementary school 1964 and Intel was t incorporated. Heck, Systems Inc., didn't hip its first product 086.

n comparing today's narket to 1964's, the io seems more rea- . After all, on top of ative stability of cor- earnings, the growth r the S&P 500 as a s 41% higher. "Over- id there was a sound r putting high valua- n the market," says referring to his Fed Of course, the earn- y not be realized, or ay disappear." mportant as today's panies may be, they smaller role in the and the economy eir mid-'60s cousins. , the S&P 500 com- 67% of total U.S. narket capitalization, leading 20 S&P com- account for 29% of ex. In 1964, the S&P ed more than 90% of arket cap, and the top 20 made ly half of the S&P. In that year, Motors Corp. was ranked sec- th 7.3% of the S&P's market cap- n. Microsoft now ranks second— only 2.4% of the S&P. Today, GM rom the top 20 list, at No. 53. l Motors workers are on strike, not that big a deal anymore," ng Won Sohn, chief economist at t Corp. "In the 1960s, people e saying that a GM strike would recession."

s Fed presentation, Siegel may have helped reinforce Greenspan's growing belief that markets aren't as irrational as he may have once thought. In recent testimony and talks, Greenspan has cautiously noted how Corporate America's productivity gains are fueling stronger-than-expected profits and therefore higher stock market valuations. "If, indeed, we end up with a wholly new type of high-tech international financial environment," said Greenspan following a speech before the American Society of Newspaper Editors on Apr. 2, the expectation of ongoing productivity gains from massive spending on technology could mean that "the markets are appropriately priced." He added that, as a central banker, "I always have great skepticism about new eras and changing structures of the way the world functions. But... I'm not wholly alien to that particular view."

Of course, Siegel's positive take on the stock market is hotly debated among academic economists. Yale's Shiller remains sure that investors are behaving irrationally, and he can readily rattle off anecdotal evidence to support that conviction. Shiller and Campbell recently published an article based on their Fed testimony of two years ago. Their conclusion: "There may be special circumstances now that will change the historical relations between the valuation ratios and subsequent stock market performance. But there have always been special circumstances, circumstances that are adduced every time the ratios have been at extremes, and that have in the past allowed people to fail to heed the message of the ratios."

Even those more receptive to Siegel's view are a bit wary. "I think there are good reasons for saying valuations should be higher than at any point in our history," says Mark Zandi, chief economist at Regional Financial Associates Inc. "But the valuations are still beyond what changes in the economy support."

Sure, at today's levels, the market is vulnerable to bad news. Still, Siegel made a strong case that the stock market is anchored to the fundamentals of higher productivity and a long economic expansion. And he may have convinced the Fed to let the bull run.

By Christopher Farrell in St. Paul, Minn., with Dean Foust in Washington

The Top Twenty, 1998 vs. 1964

The 20 Largest Companies in the S&P 500

1998	EARNINGS-PER-SHARE GROWTH*	P-E RATIO**	PERCENTAGE OF S&P 500
GENERAL ELECTRIC	15.0%	29.7	3.18
MICROSOFT	33.0	48.7	2.41
COCA-COLA	13.8	48.3	2.26
EXXON	12.0	24.1	2.03
MERCK	12.7	27.0	1.63
PFIZER	16.1	50.3	1.58
WAL-MART STORES	12.3	30.6	1.44
ROYAL DUTCH	8.3	23.7	1.40
INTEL	35.9	22.6	1.36
IBM	***	18.0	1.32
PROCTER & GAMBLE	15.5	32.6	1.31
BRISTOL-MYERS SQUIBB	16.8	30.0	1.25
AT&T	0.4	18.5	1.15
JOHNSON & JOHNSON	16.8	25.6	1.08
LUCENT TECHNOLOGIES	***	43.9	1.08
PHILIP MORRIS	7.4	11.7	1.06
DUPONT	–.01	20.3	1.01
AIG	15.5	23.7	1.01
CISCO SYSTEMS	40.2	43.2	0.90
WALT DISNEY	11.5	35.9	0.89
AVERAGE TOP 20	15.2	30.4	29.35†
S&P 500	14.8	23.5	

1964	EARNINGS-PER-SHARE GROWTH*	P-E RATIO**	PERCENTAGE OF S&P 500
AT&T	4.1%	22.0	9.1
GENERAL MOTORS	7.7	15.0	7.3
STANDARD OIL OF N.J.	8.1	17.8	5.0
IBM	18.8	36.5	3.7
TEXACO	9.3	16.9	3.1
DUPONT	–3.2	24.4	2.9
SEARS	10.0	29.2	2.5
GENERAL ELECTRIC	7.1	25.2	2.2
GULF OIL	8.4	14.9	1.6
EASTMAN KODAK	14.6	28.3	1.4
STANDARD OIL OF CALIF.	6.2	14.0	1.4
SOCONY MOBIL	10.7	13.8	1.2
ROYAL DUTCH	7.3	12.7	1.1
UNION C&C	–0.1	19.8	1.0
SHELL OIL	8.6	15.5	0.9
PROCTER & GAMBLE	7.8	26.8	0.9
GENERAL T&T	9.3	22.0	0.8
STANDARD OIL OF IND.	10.1	14.1	0.8
MINN. MINING & MFG.	10.1	32.0	0.8
FORD MOTOR	4.4	12.0	0.7
AVERAGE TOP 20	8.0	20.6	48.4†
S&P 500	10.5	21.0	

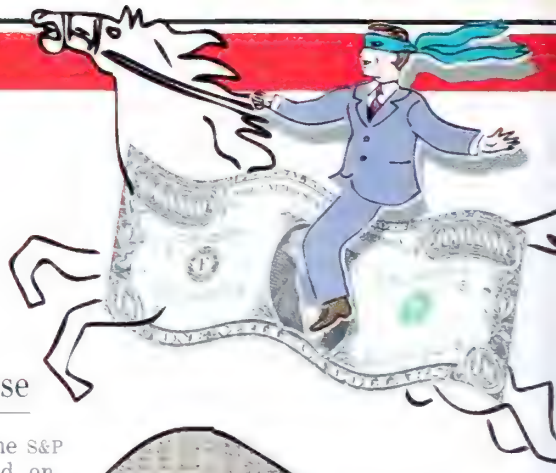
*Five-year annualized **For 1998, based on operating earnings; for 1964, based on trailing earnings ***IBM loss five years ago; Lucent did not yet exist as separate company †Total

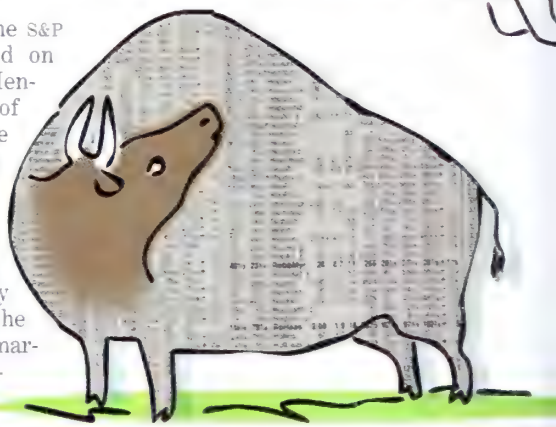
DATA: JEREMY J. SIEGEL

INVESTMENTS

THESE HEDGES HAVE SOME THORNS

Looking for big returns? You could be in for a surprise





With names such as Jaguar, Tiger, Thoroughbred, Condor, and Rebel, the point is clear: Hedge funds aim to break out of the pack and be bolder and nimbler than, say, an aging bull. And with the stock market seemingly stuck in a trading range and investors nervous about whether the bull will resume its run, many wealthy investors are turning to such funds.

Just how much money is flowing into the secretive, largely unregulated world of hedge funds is unclear. From $6 billion to $10 billion has poured in this year, estimates Lois Peltz, managing editor of *MAR/Hedge*, a newsletter that tracks the hedge-fund industry. Estimates of the total amount of money in hedge funds range from $175 billion to $262 billion in as many as 4,000 different funds. "We're getting mail from at least 15 new managers a week," says Charles J. Gradante of Hennessee Hedge Fund Advisory Group. "The industry is growing by about 33% in terms of new managers."

SOROS ASCENDANT. But just how beneficial are such funds proving to investors? In the first five months of 1998, some of the largest and best-known hedge funds have racked up impressive gains. According to *MAR/Hedge*, a number of funds under Soros Fund Management are handily beating the Standard & Poor's 500-stock index. Quota Fund, for example, had gained a hefty 26% as of May 29, vs. 12.4% for the S&P 500. Quota is a global macro fund, meaning that it tries to profit from changes in currencies and interest rates around the world by playing global macroeconomic trends. Soros' Quasar International Fund gained 25.3%. Meanwhile, Julian Robertson's Tiger fund was up 22.9%.

Clearly, big-money investors have visions of huge gains dancing in their heads. But dig a bit deeper, and returns aren't quite as impressive. Sure, all the hedge-fund managers focused on Europe beat the S&P 500 for the year ended on May 29, according to Hennessee. But an index of more than 300 hedge funds tracked by the firm shows that only Europe and technology hedge funds bested the S&P 500's gain. The other 19 fund styles tracked by Hennessee fell short of the mark—some by a wide margin. The high-yield sector, as well as market-neutral funds, which try to cancel out market exposure with offsetting long and short positions, underperformed the S&P 500 by about 10 percentage points.

The worst hedge-fund performers in this bull market shouldn't come as any surprise: short-sellers, down 3.9%. These funds did have their time in the sun, however, rising to become the top performer for the month of May, with a 9% gain. George P. Van of Van Hedge Funds Advisors International says the only year in the past five that such funds have made money was in 1994, when they gained 13.7%.

The big losers for May include Latin America funds, which are down 12.2%, followed by emerging-markets funds, which are down almost 9%. R funds were badly hit. Funds tha vest in mortgage-backed secur which have been plagued by pre ments, are also hurting. Hedge playing the dollar-yen relationship hit some snags in early June.

Trying to profit from the turm the world's currencies kept mana on their toes. Grossman Currency was one that prospered, gaining through June 30. A currency play is gaining steam is for manage short the ecu, the forerunner t euro, and go long on sterling. "Int rates in England are going up, so ling is strengthening, and those agers feel that when the ecu conve the euro, there will be a flight to ty," says Gradante.

VOLATILITY TEST. Taking a look index of hedge funds, the record the past 10 years is not so hot, The Hennessee Hedge Fund Inc more than 300 hedge funds, whi founders say represents 50% or of hedge-fund industry capital, ha performed the S&P 500 in 6 of th 11 years. For the past four year S&P has beat it handily.

A more volatile stock market w low the new crop of hedge fun prove just how nimble they ca can't—be. In the process, investor find harnessing the power of a fund far more challenging than ridi aging bull.

By Suzanne Woolley in New

HOW THE BIG FUNDS FARED

HEDGE FUND	GAIN AS OF 5/29*	ASSETS (BILLIONS)
JAGUAR FUND	19.8%	$10.0
QUANTUM FUND	13.4	5.6
TIGER	22.9	5.0*
MOORE GLOBAL INVESTMENT	17.7	4.0*
QUANTUM INDUSTRIAL FUND	7.0	2.8
QUOTA FUND	26.0	2.1
OMEGA OVERSEAS PARTNERS	–6.1	2.1*
ZWEIG-DIMENNA INTL.	3.2	1.8
SBC CURRENCY PORTFOLIO	–5.3	1.7
QUASAR INTL. FUND	25.3	1.6
STANDARD & POOR'S 500	12.4	NA

*ESTIMATE DATA: MAR/HEDGE

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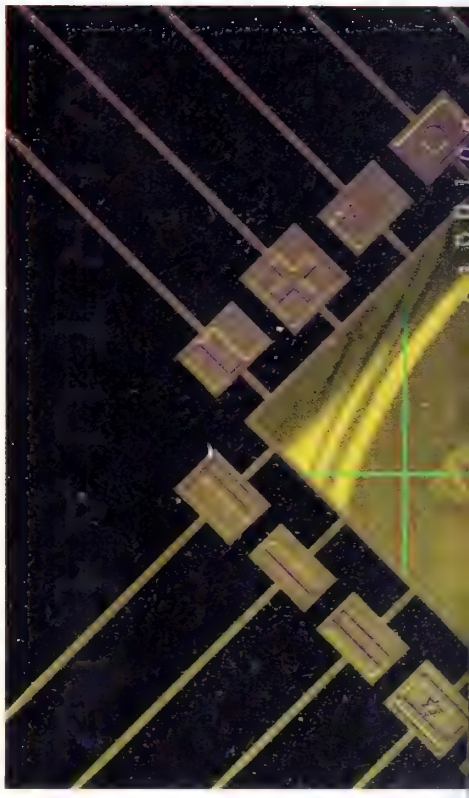

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The McGraw-Hill Companies

BY GENE G. MARCIAL

SMALL-CAPS TO STICK A FEATHER IN

Most investors either love or hate small-capitalization stocks. For Marcus Robins, editor-in-chief of the *Red Chip Review*, the quest is to find "solidly managed" small-cap companies that also have "outstanding growth potential." The review tracks 300 companies from among the 10,000 that have market caps of less than $750 million.

Robins believes there are lots of small companies that merit investors' attention. Three that top his list: Electro Scientific Industries (ESIO), whose precision gear is used in making microelectronic components; Excel Technology (XLTC), a laser systems developer; and Veterinary Centers of America (VCAI), operator of 170 pet hospitals.

Red Chip Review's Top Picks

STOCK	JUNE 30 PRICE	52-WEEK HIGH	12-MO. TARGET
ELECTRO SCIENTIFIC	$31 5/16	$63 3/4	$50
EXCEL TECHNOLOGY	8 3/4	15 1/8	18
VETERINARY CENTERS OF AMERICA	18 3/16	19 15/16	26

DATA: *RED CHIP REVIEW*, BLOOMBERG FINANCIAL MARKETS

Electro Scientific was a high-tech highflier—until the Asian flu dragged the stock from 63 last October to 29 on June 12. (Its biggest markets are Japan and Korea, making up 40% of revenues.) Now at 31 5/16, the stock is way oversold, says Robins. He figures earnings jumped to $2.75 a share in the year ended May 31, 1998, on revenues of $232 million, and will climb to $3.20 on sales of $276.1 million in fiscal 1999. The company earned $1.81 in fiscal 1997.

Excel Technology has a new laser marking system, designed for high-volume bottlers and drugmakers. This market had been out of reach for most laser systems because it requires such high speeds. But Excel's beam system is fast enough for such applications, says Matthew Desmond, an analyst at the *Red Chip Review*. Robins figures Excel will earn 80¢ a share this year and $1.06 in 1999.

Veterinary Centers "is the Wal-Mart" of the vet business—in terms of its wide reach, says Robins. The chain's rapid growth is also a result of providing improved care, particularly for aging pets. "It's the undisputed leader in animal hospitals, but its share of the $8 billion market is still infinitesimal," says Robins. Revenues for 1998 are estimated at $275 million. Robins sees earnings jumping to 75¢ a share in 1998 and to 90¢ in 1999, vs. 1997's 15¢.

WIZTEC SENDS OUT STRONG SIGNALS

The stock of Wiztec Solutions (WIZTF), whose chief software product is named Wizard, hasn't been a super whiz. Not yet, anyway, says one New York money manager who started accumulating stock when it sagged 25% to around 9 in early February. The stock has edged up to more than 11 on June 30. He thinks the price is set to take off.

Wizard software, already in use in the U.S. and 13 other countries, incorporates billing systems for the cable TV, pay TV, and digital broadcast satellite industries. Using seven languages, Wizard is in 100 such operations worldwide.

The money manager thinks Wiztec will draw attention as it signs up more high-profile customers. Current customers include Bell Atlantic and Deutsche Telekom. It has formed a pact with Cincinnati Bell Information Systems (CBIS), which has acquired a 20% stake in Wiztec. Apart from Cincinnati Bell, Formula Systems, an information-technology company, owns 43%. As part of its purchase of a 20% stake, CBIS has the option to buy much of Formula's stake, to give it a 51% ownership. Meanwhile, Wiztec is talking with other Baby Bells and cable providers, including Time Warner, for more strategic alliances.

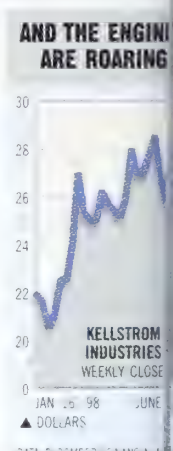
Vivek Rao, technology maven at New York investment firm Gruntal, is high on Wiztec: "As it gains increased visibility in its markets—and from its 30% growth rate—Wiztec will catch the eye of the big institutions," he sa Rao says the company is starting see a pickup in business.

Rao figures revenues will jump 40%, to $16.9 million, this year and a further 45.9%, to $24.6 million, 1999. And he projects profits will gr 38.2%, to 47¢ a share, in 1998 and 3 to 63¢, in 1999.

KELLSTROM BRASS LOADS UP ON STOC

Corporate insiders often take adv tage of secondary stock offerings cash in part of their holdings. Not Kellstrom Industries (KELL), where Zivi Nedivi and Chairman Yoav St each purchased $250,000 worth of c mon shares at the offering price of during the company's recent offer of 2.7 million shares. So far so go The stock has risen to nearly 29.

This isn't the first time Nedivi taken a big bet on Kellstrom, a lead supplier of jet aircraft, engines, engine parts to 200 customers, incl ing more than 35 major carriers. Oct. 23, 1995, this column reported Nedivi had bought $1 million worth Kellstrom, when the stock was a The stock has since become a huge winner. Nedivi, along with several money managers and analysts, believes the stock will continue to fly.



Analyst Steve Margulies of Brean Murray, a New York investment firm, figures Kellstrom will hit 40 to 45 in 12 months. With the accumulation of additional working capital, says gulies, Kellstrom has been able t crease its market share. It also broadened its expertise in almos types of commercial aviation eng including Pratt & Whitney, R Royce, and General Electric's CF6 Margulies expects Kellstrom to $1.43 this year and $2 in 1999.

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COMPUTERS

LEW PLATT'S FIX-IT PLAN FOR HEWLETT-PACKARD

As margins shrink and growth slows, the CEO struggles to rev up HP's innovation engine

For years, CEO Lewis E. Platt has used his annual management-review meeting to warn Hewlett-Packard Co.'s executives not to get sloppy. After all, the company was growing at more than 20% a year, making it the fastest-growing $30 billion company in the U.S. It would be easy for giddy executives to become less watchful. Sure enough, by last January's meeting, the company had missed Wall Street's expectations for five straight quarters. So to kick off the weekend meeting at a Monterey (Calif.) hotel, Platt tried a different tactic. The normally amiable CEO blasted his top 200-plus managers for shoddy execution, lax cost controls, and overreliance on slow-growth markets.

Then, a steely Platt told them to write down "two things you'll do differently on Monday morning." Since all the managers had laptops, Platt got their plans immediately. And he didn't like what he saw. Disappointed, he laid into them the next day. "You guys just don't get it, do you?" Platt scolded. "I expect more coherent plans from you moving forward," recalls an attendee.

FALLING SHORT. Now, Platt is facing similar expectations from investors. Since mid-1996, after years of blowing away the most bullish estimates, HP's sales have settled below the 20% growth clip analysts had come to expect. For the 1997 fiscal year, the company recorded a 12% revenue growth rate, down from 22% the year before. Worse, earnings have zigzagged wildly as the company has struggled with factors ranging from the Asian flu to erratic execution to falling prices for personal computers and printers.

The latest example: Although sales growth is back up—rising 16%, to $12 billion—HP shocked analysts with an 18% jump in operating expenses and a 12% dip in earnings in the quarter that ended on Apr. 30. That sent the stock spiraling downward 26%, where it is stuck at around 60. Concedes Platt: "The competition has closed the gap. Our execution just isn't what it used to be."

Wait a nanosecond. Not HP. This is the company that has been synonymous with progressive, top-notch management. HP is not only the inventor but also a top practitioner of many of the business philosophies and tactics that have led to Silicon Valley's global dominance of high tech—pushing the envelope by giving employees the freedom to innovate and take risks.

But in the past year, the Palo Alto (Calif.) giant has suffered a rash of embarrassing gaffes. In the summer of 1997, HP ran short on supplies of its flagship LaserJet printer for several months. Then it suffered two painful delays in the delivery of high-end computer servers. While HP prospered for decades on cushy 50%-plus gross profit margins, it now gets more than 60% of its revenue from lower-margin commodity products such as PCs and printers. That has dragged corporate gross margins down from 47.2% in 1990 to 34% in 1997—but operating costs have risen the past two quarters. "The conventional wisdom, that HP is a superbly managed company, is taking a bit of a body blow," says analyst Daniel R. Kunstler of J.P. Morgan Securities.

To be sure, HP remains a powerhouse by almost any measure. Despite falling short of Wall Street's expectations, the most recent quarterly sales growth topped the rate for IBM, Sun Microsystems, and Compaq Computer. As for earnings, which totaled $685 million in the quarter, HP has an insurance policy rivals envy: a $4 billion annual ann in lucrative paper, ink, and toner-tridge sales from its printer busi where it enjoys 50%-plus U.S. ma share. And HP remains a top playe most of its markets, including where it has vaulted from the place in 1992 to No. 4 today.

Still, the company hasn't come with any blockbuster innovations of long an HP hallmark. The company done some pioneering work in such eas as digital photography and print off the Internet, but it has failed transform these efforts into vib businesses. Instead, current and fo executives say that HP has becom focused on protecting its existing nesses that it has taken its eye of critical job of creating tomorrow's markets.

"MAINTENANCE MODE." Without b through products—which typically mand premium prices because com tion is limited—the company is forc compete largely on price. "I look as being in maintenance mode," former No. 2 Richard E. Belluzzo, left in January to run Silicon Gra Corp. "HP has got tremendous p tial, people, technology, and a brand, but there's something mi [that would] move the company t next level."

Indeed, Belluzzo had been pre hard for drastic change during his months at HP. Former and current

THE DIARY OF A STUMBLING HIGH-TECH LEADER

NOVEMBER, 1995 Wit printers and PCs boom Lew Platt tells Wall Str increase investment to 20%-plus growth.

JULY, 1996 Third-quar over-year sales growth 20% for the first time and earnings plunge b thanks mostly to a $1

disk drives and margin PCs and printers.

97 While belt-tightening gs up, sales growth falls 5% in the second quar- main soft through the ause of delays in the igh-end servers and med- Platt calls for cost-cut- adds 2,600 new employ-

agers say this put him at loggerheads with Platt, who wanted to move more slowly. Belluzzo, for example, pushed to slash pricey overseas sales offices and divert investment from slower growth, old-line HP businesses to invest in high-growth areas such as PCs, say current and former executives. Platt complained to board members late last fall that Belluzzo's superaggressive efforts had become overly disruptive, they say. Platt won't discuss Belluzzo. "I'm not going down that rathole. It has nothing to do with the issues we face as a company."

Today, Platt is clearly focused on HP's future with a two-part fix-it plan firmly in motion. First, he needs to get HP's house in order by cutting costs and sharpening execution. Longer term, though, the 57-year-old CEO wants to ensure growth by extending current businesses and creating brand new ones. To do this, he is building on the belief of founders Bill Hewlett and David Packard that smart people will do great things if given the independence and authority to make their own decisions—fast. So Platt is easing back on corporate control of HP's business units. He is giving managers more freedom to define their own goals and policies.

> "The competition has closed the gap," conceded CEO Platt about recent missteps. "Execution just isn't what it used to be"

COSTLY DISCOUNTS. But with freedom comes accountability. Through new pay policies, Platt hopes to tie each manager's salary to the performance of his or her unit. Platt was a guinea pig for this last year, when the board linked some 40% of his compensation to HP's performance. Now, Platt has asked the board to do the same for HP's top 40 executives.

The company's PC chief, Duane E. Zitzner, already is adopting the same philosophy. Starting this quarter, Zitzner will award stock options to his managers based on revenue growth, as well as shareholder value. That way, employees won't be tempted to offer unreasonable price breaks to make quota—a mistake that cost HP dearly last quarter, when it offered discounts of up to 50% to keep business from rivals such as Compaq. "We chased deals we shouldn't have chased," says Zitzner. "You get so into the battle that you can lose perspective."

Platt also is hacking away at the company's spiraling costs. He put out a call for a 5% cut in operating expenses—a pledge he made at a May analysts' meeting where he proclaimed: "I'm mad as hell, and I'm not going to take it anymore." Now, the newly empowered division heads are responding quickly. The personal-computer division, which shocked people by losing an estimated $50 million on a 70% increase in unit sales, is out banging on suppliers for price breaks. "We saw much more of a tough-guy attitude from HP within a week of the earnings announcement," says a top U.S. sup-

ees during its third quarter.

FALL, 1997 HP, the laser-printer king, botches a product transition, leaving the company with almost no inventory for months.

JANUARY, 1998 At a meeting of general managers just days after the departure of No. 2 Rick Belluzzo, Platt unveils a unit to seed new business opportunities, and demands better execution and cost controls.

MAY, 1998 The Asian crisis, PC price wars, and rising expenses cause HP to warn of yet another disappointing quarter. The stock drops 14% in one day, to 69. Platt cancels all new hiring, and cuts discretionary spending.

plier of HP's PC unit. "They were saying: 'It's a new era, and you better cut our prices or we'll go somewhere else.'"

And then there's R&D, where the company spent $3 billion last year. In the past, each HP unit kicked in a portion of sales to fund the company's vaunted HP Labs. That's fine for high-margin businesses that need top-notch technology, but it's a financial ball and chain for the PC business, which must compete with the likes of Dell Computer. The new lab tab? HP businesses now pay the labs 8% of their R&D budget, a figure tailored to the development needs of each division. "This is an example of Lew letting us run our own businesses," says Webb McKinney, who heads the consumer PC unit.

In the long run, though, Platt's No. 1 worry is growth. In late 1997, Chief Financial Officer Robert P. Wayman did a study of companies generating $40 billion-plus in annual sales and found that they grow, on average, less than a piddling 5%—not nearly enough to support HP's shrinking margins. That lit a fire under Platt, who is now trying to spark new innovation.

SKEPTICISM. One method: He has created a special unit to incubate promising new technology ideas. The first project is a whizzy new computer-display technology that Platt says could generate "billions" in sales. Unit chiefs must also show where they're spending their money. The goal: a higher mix of investment in new or fast-growing markets. "It's not enough anymore to just make your numbers," says Richard H. Lampman, who runs HP's efforts in computer research and development. "You have to show you're contributing to the future."

Will Platt's plan work? Some people are skeptical. His recent changes, they say, may not be enough to help HP address its biggest long-term challenge: developing new markets. After all, PCs and laser printers are a fixture in Corporate America, and penetration of home PCs is approaching 45%. Critics say that to meet its goal of continued 15%-plus growth, HP needs to plow fresh ground. Says former HP PC chief Robert Frankenberg, who now runs Encanto Networks Inc., a maker of networking gear: "HP needs to be less protective of its current kingdoms and go attack some undefended hills."

More than ever, that approach depends on Platt. After three months, the 32-year HP veteran decided in early May not to replace Belluzzo, who ran the printer and PC businesses that account for 83% of total revenue. Now, rather than just focusing on corporatewide functions, Platt is overseeing the major businesses himself. He heads an executive committee, which includes the chiefs of HP's six key business units. "We all love Rick [Belluzzo], but each of our businesses is big enough to deserve a closer relationship with Lew," says Antonio M. Perez, who runs the $8 billion ink-jet printer business.

HP must do more. Under his six-year CEO tenure, HP has had plenty of good ideas, but little to show for them. Consider networked printers. Few analysts argue with HP's claim that networked printers will one day replace pricey copiers. The theory: Why should companies incur the high cost of copying and distributing documents that may not even be read when they could be stored on high-speed printers and printed out as needed? Boeing Co., for example, is moving to store its huge service manuals online so that technicians can print just the parts they need. Yet HP has made little headway pushing its "distribute-and-print" vision, say analysts.

Meanwhile, HP still hasn't made much of a dent on the Internet, a mark of shame for Silicon Valley's granddaddy. Having purchased VeriFone Inc., the leading manufacturer of credit-card readers and authorization software, HP hopes to become a top electronic-commerce player by outfitting PCs with VeriFone's credit-card readers. This would allow cybershoppers a secure way to buy products or download E-cash from home. So far, there's a small pilot program with Citicorp in Manhattan, but little other progress.

There's also been little movem
Internet imaging. Analysts drool
the potential sales of printers, ink
computers if HP could accelerate
opment of technologies to let cons
and corporations print document
as coupons, articles, and annual r
right off the Web. Many technica
dles exist, but "as the overwhe

HP's SQUEEZE ON MARGINS

1992
Total revenues: $16.4 billion
Overall gross margin: 44.2%

BUSINESS	SHARE OF REVENUES	GROSS MARGINS
LASER PRINTERS	15.9%	43%
SERVICES	14.0	NA
TEST & MEASUREMENT EQUIPMENT	13.4	NA
UNIX COMPUTERS	11.0	47
PRINTER SUPPLIES	6.7	28
INK-JET PRINTERS	5.7	40
PCs	5.7	31
OTHER	27.6	

1998
Total revenues: $48.8 billio
Overall gross margin: 32.7

BUSINESS	SHARE OF REVENUES
LASER PRINTERS	12.5
SERVICES	12.1
TEST & MEASUREMENT EQUIPMENT	9.4
UNIX COMPUTERS	11.1
PRINTER SUPPLIES	13.3
INK-JET PRINTERS	19.5%
PCs	19.1
OTHER	3.0

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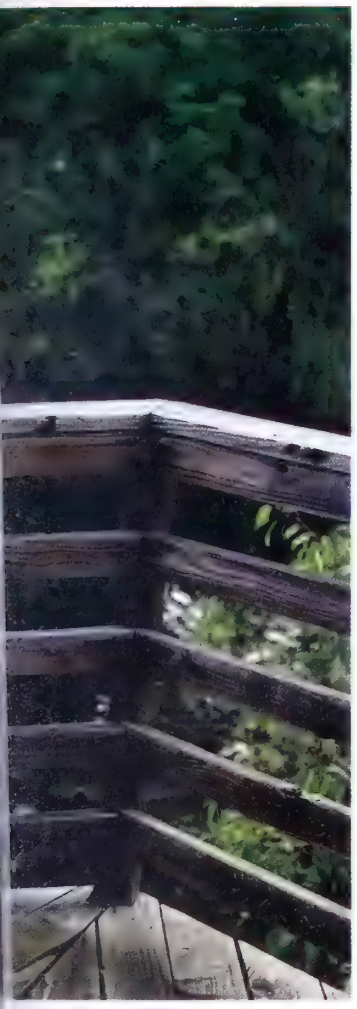


leader, you look to HP to solve
says Deutsche Bank Securities
Michael K. Kwatinetz.
big digital photography initia-
off to a slow start, too. While
)0 PhotoSmart printer was the
achine capable of matching a
t in image quality, HP has failed
v up with an all-out marketing

"HP has tremendous potential, people, technology–and a great brand," says Belluzzo, the former No. 2. "But there's something missing"

NOW AT SGI, BELLUZZO MAY HAVE PUSHED TOO HARD FOR CHANGE AT HP

blitz that could persuade consumers to give up their trusty old cameras. The result: HP has sold fewer than 25,000 PhotoSmart units since it hit the shelves a year ago, says analyst Marco Boer with market researcher IT Strategies. Later this year, however, the company is expected to roll out new products that let shutterbugs wirelessly zap their digital shots from HP cameras to special HP printers—a departure from most other schemes, which require a PC to do this.

Platt says give it time. He insists that HP launched its digital photography business knowing camera makers had yet to come up with digital gear offering the required image quality at a price most consumers could afford. "We could be accused of developing some of these markets too early," he says.

Besides, argues Platt, HP is turning up the innovation engine now. CFO Wayman says that with overall sales exceeding internal projections by 5% to 7% in recent years, unit chiefs were simply too busy keeping up with demand to focus on new opportunities. "When you're running as fast as we've been, you tend to pay less attention to cultivating seeds," he says.

That's about to change. In March, Platt O. K.'d a plan to hatch a series of internal "software startups" to attack promising cyberniches. Rather than get lost in HP's sprawling software organization, these units are set off on their own. Staffers are measured and compensated for attaining the same milestones that venture capitalists demand of typical startups, such as delivering code on time or attaining a key customer. On June 29, HP unveiled the first of these: HP OpenPix ImageIgniter, which makes software to let cybershoppers easily view and manipulate high-resolution images. Says Platt: "If we see good ideas, we'll fund them."

SPOTTY RECORD. Now, Platt must prove he will move to turn these nascent efforts into big businesses capable of sustaining HP's growth goals. There are plenty of skeptics. "Under Lew's leadership, there's been an aversion to risk," says a former HP executive. "I can't point to one big new business that has been created since he's been in place." Argues Platt: "For those who say we're not attacking new kingdoms, look at PCs."

There are signs that HP may not have the stomach for the new fast-growth, low-margin businesses that dominate high-tech these days. Since its latest quarterly disappointment, the company has backed away from a 1997 pledge to become the PC market share leader by 2001. "We're not going to chase market share at all costs," says PC chief Zitzner.

Instead, some board members are quietly wondering if PC sales are worth fighting for at all, admits Wayman. "This certainly raises questions about how good [the PC] business is," he says. Platt disagrees. The scrappy PC market is just the training ground HP needs to prove that big companies run as fast as little ones. "We envision a model where most of the computer business looks like the PC business," Platt says. "You can't duck that. It's the future." Platt has to move boldly to make that future as bright as HP's past.

By Peter Burrows in Palo Alto, Calif.

PLATT'S FIX-IT PLAN

OPERATIONS With PC prices
ales falling, he has called for
operating expenses.

AY-TO-DAY REINS Since the
arture of No. 2 Rick Belluzzo—
units accounting for 83% of
s—Platt has created an eight-
itive committee to stay in closer
ll parts of the business.

THE BUSINESS UNITS Platt is
s decentralization even further.
companywide measures, managers are encouraged to devise financial models, compensation plans, and tactics for their own markets. He's also lighting a fire under HP's collegial culture with new pay-for-performance policies.

HUNT OUT NEW GROWTH A new unit will serve as an incubator for good ideas—many of which now get lost in HP Labs or dropped by overstretched product groups. Also, managers are now evaluated not just for financial performance but also by how much of their spending is allocated to emerging opportunities.

AUTOS

CAN NISSAN REGAIN ITS YOUTH?

The new focus is on quality and long-term profits instead of U.S. sales volume

As far as Minoru Nakamura is concerned, his job is to create a brand new Nissan for the U.S. It's not a new car he's talking about, either. It's the whole company.

Nakamura, president of $16 billion Nissan North America Inc., knows that it's time for desperate measures. In the year ended Mar. 31, his company's U.S. sales and marketing subsidiary lost $787 million, pulling the struggling Japanese parent back into the red. Worldwide, Nissan Motor Co. lost $105 million on sales of $49.3 billion.

Starting in October, Nakamura pushed aside five top executives and stepped in as head of the U.S. sales arm. Now, he's disbanding the sales company and folding it into Nissan North America. He has pulled the plug on a $200 million brand advertising campaign that spun humorous stories while all but ignoring the cars. He's dropped two sporty but slow-selling coupes from the line. And he has trimmed customer and dealer cash incentives from record levels and ordered Nissan's Smyrna (Tenn.) factory shuttered on Fridays for the rest of the model year to cope with lower sales.

The result? Sales have dropped 28% for the calendar year through May, to 231,146 vehicles, in a market that's slightly up. But it doesn't bother Nakamura. "Nissan has changed from a volume chaser to a profit-oriented company," he says. "Depending on the market, it may be difficult to be profitable this year, but at least we can turn around last year's loss situation." Profits, he says, should follow next year.

ANCIENT GLORY. Analysts say that while the current crisis threatens the very existence of the parent company, it may be the best thing that ever happened to Nissan. They point to similar events at Ford and Chrysler in the '80s and Mercedes-Benz and BMW in the early '90s that caused fundamental changes in culture and attitude that got those companies back on track. "Nissan's back is against the wall, and that will foster

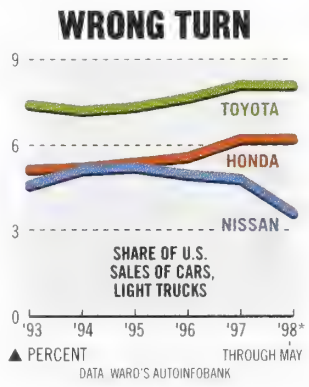
," says Christopher W. Ceder- managing director of market re- er Nextrend in Thousand Oaks,

an, in fact, has been struggling to way for more than a decade. In s and '70s, the feisty importer, nder the Datsun name, could do ong. Every product, from the e Datsun 510 sedan to the sporty, ble 240Z sports car, hit a bull's-eye merican buyers. Even the dogs sell. Once, alerted that three ds of mustard yellow B210s with eriors were headed their way, an marketers decided to add a tripe to the side and a stick a bee decal on the trunk. The so- called Honeybee became such a fad in California that Datsun had to reorder more of the ugly cars. By 1975, Datsun had passed Volkswagen to become Ameri- ca's leading importer.

NO VROOM. All that changed in the '80s. In 1981, Tokyo head- quarters ordered Datsun to jet- tison its name and start using the Nissan brand in the U.S. The changeover dragged on for years, with dealers refusing to take down their Datsun signs and cars carrying both brand names. With restrictions on Japanese imports in the early '80s, Nissan could sell everything it shipped. Profits soared, and complacency grew. While Toyota and Honda invested in their U.S. dealers, Nissan took its profits back to Japan. Nissan's U.S. sales, which peaked at 831,000 n 1985, slid for the rest of the decade and didn't begin to re- cover until 1993.

Nissan's latest problems in the U.S. stem directly from the products it sells—and doesn't sell. For one thing, it has lost its image. Toyota Motor Corp. is known for its unequaled quality, Honda Motor Co. for its slightly hipper, high-quality cars. Nissan used to be known as the sporty Japanese car company, but as the market for sportsters has flagged, it has killed off all of those models: the NX series in '94, the 300ZX in '96, and the 200SX and 240SX this year. There are widespread rumors that Nissan is plan- ning a revival of its 240Z, but Nakamura isn't quite tipping his hand. "Lots of Nissan's image comes from the Z," he says. "The sports car market has shrunk, but I still think we need that sort of product."

In the meantime, the styling and per- formance of the vehi- cles it still sells have grown progressively more conservative. "They totally discon- nected with what the American consumer is looking for, so the only way to sell cars is to use incentives," says Arthur M. Spinella, an analyst at CNW Market- ing/Research Inc. in Bandon, Ore.



Nakamura has put in place a back-to-basics strategy that is aimed at correcting the problems. First off, design authority for virtually every vehicle that carries the Nissan badge in the U.S. has been handed back to Nissan Design Interna- tional, the company's San Diego studios, from its Tokyo designers.

It's too early to tell whether the new products will move Nissan back into the first tier with Toyota and Honda, but the track record of Gerald P. Hirshberg, NDI's founder and president, is good. NDI's first design, the 1987 Pulsar NX, won Nissan its first-ever Car of the Year award in Japan. The studio's Alti- ma family sedan, introduced in 1992, more than doubled the sales of its pre- decessor, the Japan-designed Stanza. NDI also designed its first-ever Sentra, Nis- san's entry-level sedan, which is coming in 1999. Next fall also will bring an American-designed Maxima that will be sportier than the current version, a col- laboration between Japanese and Amer- ican designers. In April, Nissan will launch a new compact sport-utility ve- hicle to compete with Toyota's RAV-4 and Honda's CR-V.

As Hirshberg tells it, Nissan lost sight of the American market in the early '90s. With the U.S. market slump- ing, Nissan focused its designs on Japan. The results are just showing up. Nissan rejected NDI's design for the Pathfinder sport-utility vehicle and went with one aimed at the Japanese market. "It's pretty prissy for a sport ute," says an- alyst Cedergren; U.S. sales are down 11% from a year ago. The new but style-challenged Frontier compact pick- up is an even bigger disaster, with sales off 44% in the first five months this year. "It may be fine for a farmer in Japan, but Americans aren't even con- sidering it," says CNW's Spinella.

FEWER PLATFORMS. Given its U.S. loss- es, Nissan couldn't wait for next year's new products to kick in. So last fall, Nakamura put a halt to many of the marketing devices Nissan had been us- ing to prop up sales. In 1996, for in- stance, Nissan started fiddling with leas- es, driving the monthly payment down by inflating resale val- ues. When the cars started coming back from lease, Nissan couldn't sell them at high enough prices. Its loss last year included a $300 million reserve to cover cars still under lease. Unprofitable sales to rental-car fleets, an- other way Nissan pushed its volumes up, also have been axed. The result: Annual sales have fallen from the 750,000-to-770,000 range of the mid- 1990s to around 650,000 today.

Advertising has also been recast. Gone are the amusing "Enjoy the Ride" ads with cameos by an enigmatic Japa- nese character and his Jack Russell ter- rier. In their place are spots featuring the cars and, in some cases, compar- isons with the competition.

It has been a bitter pill for Nissan to swallow, but the moves in the U.S. are only a small part of more sweeping changes wrought by the parent compa- ny. Worldwide, Nissan has posted losses in five of the past six years. When it an- nounced the current loss in May, Nissan said it would cut the number of vehicle platforms it builds, including the Altima, from 25 today to 10 by 2003. It is selling some of its holdings in sister companies to pay off debt that now totals 37% of revenues.

"Drastic action was called for, and, absolutely, there are signs that they're taking it," says Lincoln Merrihew, an analyst at researcher J. D. Power & As- sociates in Agoura Hills, Calif. Nakamu- ra's overhaul clearly shows that he is setting aside short-term objectives in favor of the long haul. The U.S. auto market is in its fifth year of robust sales, but sooner or later, it will undoubtedly run into roadblocks. Nakamura can only hope that he turns the company around before the ride gets more bumpy.

By Larry Armstrong in Los Angeles

Nakamura has replaced Nissan's leadership and ineffective ad campaign in the U.S., where its image has taken a beating

ISTANT RUMBLE: NAKAMURA ND A DATSUN 240Z

BUSINESS SCHOOLS

COLUMBIA B-SCHOOL MAKES THE A-LIST

Meyer Feldberg's charm and connections spur a turnaround

It's early on a Sunday evening, and Meyer Feldberg is happily ensconced in his Manhattan flat. Spending a cozy night with a good book? Hardly. The dean of Columbia Business School is hard at work—entertaining. Tonight, he's hosting a reception for the school's 74-member board of overseers, a group of high-wattage executives that includes Mario J. Gabelli, Henry R. Kravis, and Benjamin M. Rosen, chairman of Compaq Computer Corp.

While the business titans sip cocktails and admire the paintings of Feldberg's wife, Barbara, the native South African, 56, works the crowd confidently. A dapper dresser whose flashy cufflinks, suspenders, and tie stand out in a sea of banker blues and grays, he wins a promise to teach a course here, a gift toward a new building there. He cajoles, flatters, and prods the board members into donating more time and money than they ever intended. "I think Meyer Feldberg can do anything," says Raymond G. Viault, vice-chairman of General Mills Inc. and a B-school board member.

LONG TERM. In a world where B-school deanships are revolving doors, Feldberg is an anomaly. Now in his ninth year, he has pushed Columbia from an organization adrift to a school whose selectivity and reputation have improved dramatically—and he has invigorated the school's once passive alumni in the process. In BUSINESS WEEK's ranking of the top 20 business schools, Columbia vaulted from No. 14 in 1988 to No. 6 in 1996, the most recent ranking. From 1993 to 1998, applications surged 81%—compared with 56% for the University of Michigan Business School and 36% for Harvard Business School. And while the MBA is hot everywhere, Columbia's shift has been striking: Fully 47% of applicants were admitted in 1992, but just 13% made it in 1997. The newfound energy—along with flush economic times—has boosted the endowment to $110 million, up from $16 million in 1989.

CAJOLER-IN-CHIEF B-school dean Feldberg expects recruiters and hiring execs to serve as guest lecturers

In part, Columbia's renaissance has mirrored New York's. Columbia "is the quintessential business school in the quintessential city," says Feldberg. "Crossing the street at Broadway and 116th Street is part of your education."

So, too, have the school's fortunes with Wall Street's. Columbia ha come a favorite recruiting haunt vestment banks, thanks to a str nance department and Feldberg's for exploiting his surroundings, br the likes of Kravis, Gabelli, and V. Shipley, chairman of Chase M tan Corp., to mingle with student

TIGHT QUARTERS. It's a heady a phere. Feldberg says that while 40% of entering students say they centrate in finance, over half year's graduating class has taken the area. In this raging bull m the uptown/downtown link is a d asset. But should the market t worry some Columbia board me and alumni, it could quickly becom ability. Warns Viault: "The school's itational pull [toward Wall Stree strong and should be resisted."

Times were not always so f 1994, stuck in overcrowded, Uris Hall when rivals were mov glamorous new homes, Feldberg out the stops. He threatened t the school to the suburbs if the sity didn't let it join with the la to put up a new building on th an old post office. To prove h raise the cash, Feldberg, with help, held a meeting of 12 pr graduates, including Leon G. man, chairman of Omega Advis

MEYER FELDBER

BORN Johannesburg, South Africa, 1942

EDUCATION BA, Uni sity of Witswatersrand 1962; MBA, Columbi University, 1965; Ph University of Cape To 1968

FAMILY Married to painter Barbara Feldb two children (30, 27) one granddaughter (1 months)

ACADEMIC SPECIA Organizational behav

CLAIMS TO FAME Internationally competitive swimmer late 1950s; ballet lo knows the world's be hotel-workout faciliti

STATED AMBITION Make Columbia the world's best B-schoo

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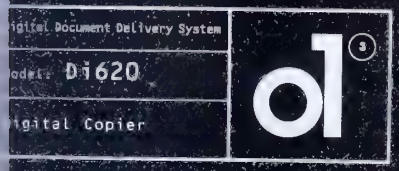

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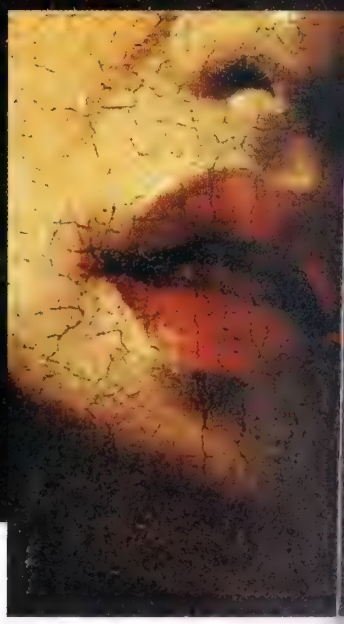

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abelli. Feldberg turned on the . Within three days, he had $12 committed, and the university pproved the project. The $42 mil- uilding—jokingly called Quintes- Hall or House of Meyer in the t newspaper—will open this fall. aps because Feldberg himself was broad, he has made the school a for students interested in a glob- cation. Columbia was one of the -schools to weave international is- roughout the curriculum, thanks to a $10 million gift in 1991 from A. Chazen, then head of Liz Clai- Inc. Before international cases be- rendy elsewhere, the school of- exchange programs and gave ge courses.

berg has fol- through on missions side : 30% of the ts are from and 80% are n other lan- (China is the feeder.) Re- are pleased.

> Columbia's focus on Wall Street is a concern: What happens in the next downturn?

uality of MBAs at Columbia has d," says Richard B. Fisher, chair- the executive committee at Mor- nley Dean Witter & Co. "We find id more people we want to hire."

IAL TOUCH. Feldberg brings the ompetitive zeal to his job that ved as a world-ranked swimmer h Africa. He loves to compare gy of Columbia to rivals such as uth's Amos Tuck School of Busi- lministration, poking fun at its campus in rural New Hamp- Before Columbia, he served as Tulane University's B-school president of the Illinois Insti- Technology.

ders admire Feldberg's talent ling a personal relationship with tors. "Besides formal meetings," mpaq's Rosen, "he meets with dividually. In turn, everyone en- ving. It's not just window-dress- ldberg sends handwritten notes ra of E-mail, scrawling a memo ue marker when a board mem- ld gets married or a professor award. "It's the larger-than-life e in the thicker-than-life pen," e Schinderman, the B-school's dean for special projects.

erg also reminds headhunters recruiting process is a two-way n return for Columbia's best htest, he expects not only a it also a guest lecture or a se- ong course. "He's shameless," laughs Jerry I. Speyer, chief executive of Tishman Speyer Properties. "His enthusiasm is infectious." Morgan Stanley's Fisher is a Harvard graduate, but he will nonetheless show up at Columbia to speak next year and has helped coworkers raise $750,500 for an amphitheater in the new building.

CATCHUP. Feldberg's social flurry makes some wonder if he is neglecting his students. Feldberg admits that he spends less time at Uris Hall than he did in the early 1990s, when he sat in the school's deli with his bagel and heard a litany of student complaints. Says Saul D. Goodman, vice-president at Evercore Partners and a member of the Class of 1994: "I could see a student going to Columbia, having a great experience, and never having seen him. But it's not as if you need to, because everything's kind of O. K."

That's partly because Feldberg has a strong team, led by Vice-Dean for Students Safwan M. Masri. But he still holds office hours and hosts student breakfasts. "When certain things happen," says recent graduate Erin Leixner, "he likes to be around." When the stock market fell last year, he met with students to ease concerns.

For all of Feldberg's goodwill, there are still many issues to tackle. Despite the new building, space remains a problem. Some students complain that the school's teaching quality is uneven, even with a program to hire new faculty. The finance focus makes Columbia vulnerable to placement problems should the market tank. And as the caliber of students rises, so do expectations—keeping the pressure on the dean.

Feldberg is trying to build up the school's status in other sectors such as media, entrepreneurship, and real estate. Yet many students feel the school has a way to go. "For new media, it has definitely been a struggle," says Michelle S. Nasir, a recent graduate. "They do offer some good classes, but not enough." Few, however, doubt that Feldberg will do what it takes to keep his students at the forefront of recruiters' minds. "I have spent my career studying senior executives," says Donald C. Hambrick, a tenured management professor, "and I would rate him up there among the best." The biggest risk may be that recruiters come and steal away Feldberg himself.

By Jennifer Reingold in New York

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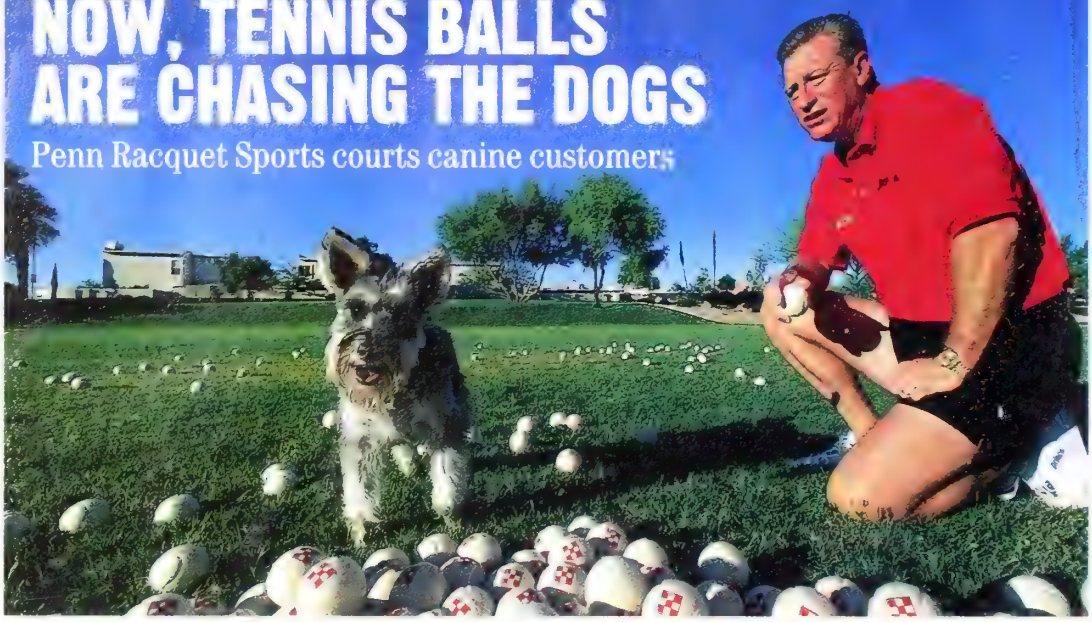
STRATEGIES

NOW, TENNIS BALLS ARE CHASING THE DOGS

Penn Racquet Sports courts canine customers



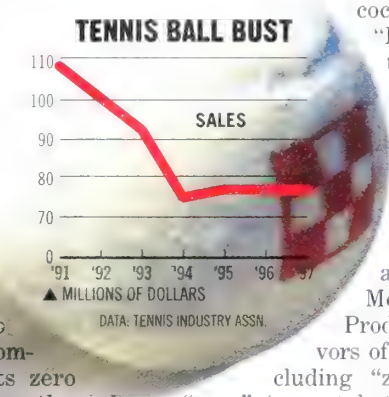
Suppose your industry were in free fall. What would you do to find more customers? Would you go global in search of sales? Try the Internet?

How about switching species?

That's the drastic move made by Penn Racquet Sports, the nation's No. 1 maker of tennis balls, which is suffering from flat sales and a decade-long lull in recreational tennis. This month, Penn begins marketing its familiar, fuzzy orbs to some undeniably loyal customers: dogs. R. P. Fetchem's is a traditional tennis ball that has been gussied up as a "natural felt fetch toy" for pooches. "Ten times more people own pets than play tennis," explains Penn President Gregg R. Weida, owner of a schnauzer named Jake.

NO DYES. Penn is teaching an old ball new marketing tricks—and hoping to bounce its estimated $70 million in sales up by 5% to 10%. For the benefit of four-legged consumers, Penn has made the balls dye-free. They sport the Ralston Purina Co. logo, thanks to a licensing deal with the dog-food giant. The biggest change is the price: $4 to $5 for a can of two Fetchem's vs. $2.50 for three old-fashioned tennis balls. That hasn't deterred retailers. PetsMart Inc. will test them, ordering 400 cases for its 413 stores. "The fact that it's got the Ralston name and the natural felt are pluses," says Greg Forquer, PetsMart vice-president for merchandising.

But that won't attract more tennis players. For Penn—a small Phoenix-based division of chemical and defense conglomerate GenCorp Inc.—making a move into dog toys may be one indication that tennis shows no imminent signs of a comeback. The game has a base of 5 million hard-core players, but it's losing the weekend whackers, explains Brad Patterson, executive director of the Tennis Industry Assn. Recreational play is down almost 20% over the past decade. Ball sales have dropped 29% since 1991. "Twenty years ago, there was no inline skating, no Blockbuster Video, no home computers," rues Patterson. "It's harder to grab mind share."



Like other ballmakers, Penn has been unable to duck the force of the tennis devolution. Midwest Research analyst Mark E. Koznarek, who follows Penn's parent company GenCorp, forecasts zero growth for Penn and tags the unit a "below-average part of the business" that is ripe for a sell-off.

The dog-toy solution had been kicking around Penn for years. But in 1996, it found a champion in Laura Kurzu, who directs Penn's account at Veritas Advertising, a St. Louis agency. Kurzu had

ADVANTAGE, JA
President Weid with R. P. Fetch

connections at ston Purina an convinced the should enter i licensing deal. " laughed at from sides," recalls H

"CHEAP." But may get the chuckle. Tennis be stalled, but pampering is ing. Human will shell out $ box for doggie and will pay for a pet canop Most importa Penn, they buy Last year, owne ished $41.7 mill dog toys sold stores, says th Industry Join visory Council (

While $5 a can might make players gasp, it's no barrier fo lovers in search of the perfect "That's cheap," says Jim Sween gional manager in Chicago for Pe plies Plus, a 145-store chain. H dog toys for as much as Sweeney hasn't been pitched Penn sales force but predicts he move 1,000 cans of Fetchem's a New York dog owner Joel Katz balk at the Fetchem's pri "This guy will do an for a ball," he said cocker spaniel, "He loves them than food."

But while knows the ball world, encounter of new compt in the pet to ness. Indeed already has Melia Luxur Products makes vors of dog tennis b cluding "zesty orang "PB&J" (peanut butter and jell sales are in the "hundreds o sands," says President David V Pet watchers aren't surprised more entries. "Everyone an brother wants to get in," sa Mitchell of PIJAC. Fetch, anyone

By Dennis Berman in N

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ETIME AROUND 2000, SAY INVENTORS AT THE MASSA- setts Institute of Technology's gas-turbine lab, en- s the size of shirt buttons could begin to replace 10- 0-watt batteries in handheld computers, cell phones, camcorders. Lab director Alan H. Epstein predicts an engine-driven power pack could be made about 25% smaller than today's lithium batteries, and could run twice as long between rechargings.

Make that refuelings. The MIT invention resembles a jet engine, with a 2-mm-long combustion chamber, a 4-mm turbine wheel, and a tiny generator. The engine runs on ne and tanks come in different sizes. One the size of top battery pack could deliver 20 hours of comput- se.

far, only the combustion chamber and the wheel been tested. The generator won't strut its stuff the fall. But over the next five years, Epstein be- s, output of these tiny engines will soar to 100 s. That's enough to satisfy the U.S. Army, MIT's sor, which wants a new power source for its global ioning system receivers, night-vision goggles, and military gear. *Nellie Andreeva*

IAL SKIERS CAN ' THE MOGULS

ETITIVE SKIER, VIRTU- ty researcher Craig ell wanted to make er simulations as ex- s downhill racing. So he founded a compa- d Virtual Motion Inc. sburgh to develop a pe of video game . There are no spe- gles. But his device the inner ear's ar system, which con- alance. The headset of three nerve stim- pressing against the d and behind each transmitting differ- erns of weak electri- als, the set tricks a staring user into that he or she is moving up or down, forward or backward.

Although the technology for stimulating nerves has been around for years, Virtual Motion is the first to employ such techniques to activate the inner ear. The first big challenge was working out specific signal patterns to simulate complex movements. Researchers then had to experiment with the motion patterns until they had learned enough about them to coordinate the motion sensations with the video. Campbell pulled this off with $1 million in venture capital. Now he is seeking manufacturing partners to make the headsets, which also work with VR goggles. He predicts that they will be in stores by Christmas, 1999, and will sell for about $80. *Johanna Knapschaefer*

THIS MICROSCOPE CAN POKE AT ATOMS

SINCE THEIR INVENTION A decade ago at IBM and Stanford University, atomic force microscopes (AFMS) have produced startling images of exotic atomic landscapes. The scopes perform their magic by dragging a superfine needle across a sample of material. The needle bumps up and down as the atoms that form its tip are repelled by atoms on the sample. A computer then translates the movement into dazzling, multicolored topographic drawings.

Early AFMs used silicon tips. But in 1996, Nobel prize-winning chemist Richard E. Smalley replaced the silicon with a tough new carbon structure known as a "nanotube," which proved more flexible. Now, in the July 2 *Nature*, Harvard University chemistry professor Charles M. Lieber offers a glimpse of what nanotube tips will do for biology. Lieber and his team chemically modified a nanotube so that the AFM needle itself can perform chemical analyses as it travels over the sample. Since the tube is made of carbon, Lieber explains, "we can exploit well-developed organic reactions to attach various molecules that interact differently with the sample." That opens great possibilities. For example, it will be possible to explore features on a cell by attaching something to the nanotube that binds to a particular receptor. Or one could test whether a new drug molecule binds to a protein.

AFMs still can't deliver 3-D images of molecules. That requires x-ray crystallography, which constructs images out of patterns of x-rays diffracted from crystals. "But AFMs allow you to get functional information about the molecule you are studying," Lieber says. □

TO ZAP SAND FLIES, TRY BUFFALO BREATH

FROM THE MANGROVE MARSHES AROUND BOYNTON BEACH, Fla., biting sand flies swarm into backyards and playgrounds, making life miserable for residents. University of Florida entomologist Jonathan Day feels the residents' pain—and has come up with a dandy fix.

Like all biting insects, sand flies—called moose flies and "no-see-ums" in the Northeast—track their hosts through plumes of carbon dioxide released by respiration. To protect school yards, Day is building fences—up to 1,500 long—fitted with traps that slowly release carbon dioxide and octenol, a chemical the bugs mistake for water-buffalo breath. The bugs swarm to the traps and get stuck in mineral oil that lines special mesh panels over the vents. In a recent one-day test, Day nabbed 200,000 sand flies in a single trap.

When the mineral oil is replaced with insecticide, Day says, the fence also works effectively against such blood-sucking nuisances as mosquitoes and deer flies. Day has applied for patents, and Air Liquide America Corp. of Houston plans to develop the product. □

FOR FURTHER INFORMATION: Go to Business Week Online at America Online or E-mail dtwjuly@businessweek.com

EDITED BY KAREN PENNAR

WHAT TO DO BEFORE DISASTER STRIKES

Already this year, ice storms have devastated northern New England, El Niño rains have battered Southern California, and tornadoes have hammered cities from Oklahoma to Maryland. In recent weeks, brushfires have destroyed more than 100 homes in northern Florida. And the hurricane season is just beginning.

It's hard to imagine the toll taken by a natural disaster: family members injured or killed, homes destroyed, businesses shuttered, whole towns living in high school gyms.

But at least, you think, insurance will pay to repair the damage. Except in many cases it does not. You may not be covered at all for some losses, or carriers may refuse to give you full value for your home and its contents. "There are a lot of companies that will lowball," says Robert Hunter, director of insurance at the Consumer Federation of America.

How can you protect yourself? The easiest way is to make sure you are fully insured—well before disaster strikes. Here's a checklist:

■ What's covered? Most policies will protect you against fire, theft, and wind. But they exclude earthquakes, floods, and sewer backups.

You can buy extra protection against backups for a few dollars. Earthquake insurance, by contrast, can be very costly. In California, you'll have to buy it from a state pool.

Flood insurance is provided by the federal government, although you can buy it through most agents when you purchase your homeowner's policy. It will cost an extra $300 to $500 a year for a typical home, but if you live in an area that floods, you will need it.

■ Will your carrier pay 100% of the cost of rebuilding your home and replacing your personal property? You should always purchase full replacement insurance. But buyer beware: Carriers are now limiting what they will pay, even for full replacement policies. Even if you get replacement cost coverage, your insurer still may not make you whole.

INSURANCE

Say you have such a policy, which states the value of your home is $200,000, but estimates to rebuild come in at $300,000. Until recently, insurers would cough up that amount. But because they had consistently understated home values in insurance policies, and because replacement estimates can run very high, insurers were getting killed.

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■ What contents are
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ONE PICTURE IS WORTH . . .

Since a storm can destroy your records, document what you own, and store the list–preferably including photos–in a safe place

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total loss. To avoid
ns, make a record of all your possessions. "Take a tour of your home with a video-camera," says Chubb home-office catastrophe-claims manager Peter Seay. At the very least, take still pictures and make a written list. Store the documentation in a safe deposit box or ship it off to Uncle Harry in Altoona. And don't just store a record on your PC. It won't help if your desktop burns to a crisp.

Finally, make sure your insurer knows about your artwork, jewelry, and collectibles. If they are especially valuable, get them appraised and buy riders to cover them separately.

TRANSLATIONS. Since most policies are in legalese, ask your agent to explain your coverage, and insist that he show you, in the written policy, just what is covered. And do it on a lazy summer afternoon—before that big storm hits.

If a calamity does strike, be ready to deal with both your agent and an adjuster—who will determine the value of your loss. After the most serious storms, carriers will send their own emergency response teams to your town. The federal government may get involved, as well. The President could declare your county a disaster area and send staffers from the Federal Emergency Management Agency to set up shop.

FEMA can make small cash grants to storm victims and, through the Small Business Administration, make low-interest loans of up to $40,000 to homeowners. That can help, but it isn't intended to replace private insurance.

Once you are safe, contact your agent or call your carrier's 800-number. Good insurers will try to contact you within 24 hours of a catastrophe. But it will take days—if not weeks or months—to get a check for the full amount of your losses. Most companies will provide money right away for living expenses. That will pay for a hotel room and some clean clothes. A few, including high-end Chubb, will find you a rental house. Insist on enough cash to keep you going for a few weeks. "They should be handing you some pretty fast money if you can't live in your house," says Hunter.

Once you've restored some sense of order to your life, you'll need estimates for rebuilding. Unfortunately, the first days after a natural disaster are the worst time to do it. Demand for reputable local contractors is enormou and fly-by-night operators descend on disaster sites like jackals. That will be a problem for getting estimates and, later, for doing the work.

If you can, find a contractor you've used in the past. But remember, there is no hurry. You'll be happier getting the job done right than getting it done fast.

Whatever you do, don't feel pressured to take the insurance company's first offer. You will be at your most vulnerable, and insurers know you are eager to get back in your house. If you think you are being low-balled, don't take their check. Use your own estimates to negotiate.

Remember that your bank probably owns more of your house than you do. And it will have first claim on any settlement. So be prepared to work with your mortgage lender to finance rebuilding.

Good insurance companies can help you get through a terrible time. Bad ones will make the pain worse. The best time to sort the good from the bad is long before disaster strikes. Review your homeowner's policy, talk to your insurer about additional coverage and riders, and do cost comparisons with competing carriers. Surviving a disaster is enough of an ordeal. At least you can plan now to make the aftermath a little less painful. *Howard Gleckman*

Protecting Against Calamity

BEFORE...

t full replacement coverage for your home and contents, and be sure all rebuilding costs will paid. You may also need extra insurance for ods, earthquakes, and sewer backups.

ep a record of all your home's contents, not t your valuables. Videotapes or photos are your t proof, but keep them outside your home.

your agent about your fine art, collectibles, l antiques. You may want to get special riders cover them.

...AFTER

- Contact your agent right away.
- Request living expenses if you can't stay at home.
- You don't need to accept the company's first settlement offer. If you think your carrier is low-balling, get your own estimates and negotiate.
- Be wary when hiring a contractor to make repairs. Quality workers will be hard to find, but fly-by-night outfits will not.

DATA: BUSINESS WEEK

TRIUMVIRATE: *Co-man Lurito, Sharon, and run $5 million in ass*

A FUND THAT'S RIDING THE EUROPEAN WAVE

Two years ago, when a venture capitalist urged Harold Sharon to take a look at Harveys Furnishings, a British furniture and rug chain, his reaction was "Harveys who?" Indeed, Harveys appeared to be "a prosaic, marginally profitable company," recalls Sharon, co-manager and chief international stock-picker for the Warburg Pincus Global Post-Venture Capital Fund. But a different story emerged when Sharon started digging. He learned that Harveys' top guns were being replaced by new managers who planned to shake up the stodgy retailer and go for growth. Convinced the stock was undervalued, Sharon bought in. As the rest of the market cottoned to the new Harveys, its stock soared, enabling the fund to notch a 50% gain on the stock when it sold out 12 months later.

In the two years since the fund's inception, its three managers—Sharon, Elizabeth Dater, and Stephen Lurito—have made a name for themselves by getting in on the ground floor of big movers such as Harveys. Up nearly 50% last year, the tiny Warburg Pincus fund—its assets are $5 million—was the top-performing global mutual fund of 1997, according to Standard & Poor's Micropal. With a gain of about 19% so far this year, the fund shows little sign of losing its momentum.

SMART MONEY

The fund invests in U.S. companies, too. It has, for instance, a holding in Premier Parks, owner of the Six Flags amusement parks and the fastest-growing regional theme-park operator in the world. But most of its pizzazz comes from the revolution sweeping European markets these days. Deregulation and the birth of the euro are breeding a rash of privatizations, initial public offerings, and corporate restructurings. The trends are drawing venture capital from around the globe—and providing fertile ground for the type of companies the Warburg Pincus fund favors.

With 35% of its assets in Europe, the fund invests in companies that private investors have bought out, restructured, or taken public in the past decade. Managers of these companies typically own large stakes and, as a result, "have a lot of incentive to run the business well," Dater says. In fact, most of the 65 companies the fund owns expect earnings to grow a tidy 30% in 1998.

Occasionally, the fund invests alongside venture capitalists. It joined in the June privatization of Seat, Italy's leading phone-directory publisher, for example. The deal was Europe's biggest leveraged buyout ever, with venture capitalists buying 70% of the company for $3 billion and an additional $1 billion going in through an initial public offering. The Warburg Pincus managers put some 4% of their fund's assets into the IPO. They're betting that, while the venture capitalists will most of the cost of r turing the notoriousl ficient publisher, outs vestors will make m the makeover works.

PRECISE PICK. One Co tal turnaround stock th has already profited Mettler-Toledo Interna a Swiss maker of pr instruments. Venture ists bought the compar the former Ciba-Geig years ago. They install management, cut cost off their acquisition and reported a 100% i in first-quarter earning annual earnings gro more than 20%, the $8 lion company looks ably valued at 16 tim mated 1999 earnings, says.

Another favorite is British company restr in the late 1980s. Hays supplies business s such as warehousing, mail, and temporary now has a market v $7 billion and is exp internationally. It ha one of the fund's bigge ners, up 150% since of 1996.

With the deals in expected to conti breakneck pace, ventu italists are likely t turning up dea Warburg Pincus. Post-Venture Capita be a mouthful. But holders certainly are plaining. *Kerry*

Warburg Pincus Bets on Euro

COMPANY	PRICE*	EST. P-E*	DESCRIPTION
EXPRO INTL. Britain	$8.33	18	Surveys, manages oil
SAIA-BURGESS ELECTRONICS Switz.	$262.91	17	Minimotors for luxur
SAUER (SHS) Germany	$13.38	12	Hydraulic systems m
SEAT Italy	$0.66	20	Phone-book publisher

*June 29

DATA: BLOOMBERG FINANCIAL MARKETS, E.M. WARBURG PI

EPARATING BALLYHOO ROM BREAKTHROUGH

ost daily, head- s trumpet the ings of new med- studies, from to cure cancer to diets nsure good health and ity. Then, in short or- ontradictory evidence follows. For nonscien- ypes, this wealth of l information can be nding. How do you te the ballyhoo from eakthroughs? t, it pays to remember a study's crossover to instream press, "a lot eats get lost in the ition," says Dr. Alan , director of the Center ary Care & Outcomes rch at Stanford Uni- in Palo Alto, Calif. t studies represent an on, not revolution, in ne. "Sudden, dramatic ries happen incredibly says Drummond Ren- deputy editor for the *l of the American l Association* (JAMA) ofessor of medicine at iversity of California Francisco. So be skep- out "breakthroughs." ate the significance of research, look for key details in reports on medical studies. If a study is epidemiological, then it's not much more than an educated guess. Epidemiological research looks at large groups or populations to make correlations between such things as diet or habits and health. Because the studies do not occur in a controlled environment, they "are good for generating hypotheses but they don't prove anything," says Garber. A case in point: Researchers still believe that the Mediterranean diet, which is rich in olive oil and vegetables, may cut the incidence of heart disease, as the famous 1960-85 Seven Countries Study suggested. But even after adjusting for numerous variables, researchers could not eliminate all the factors that might explain their results.

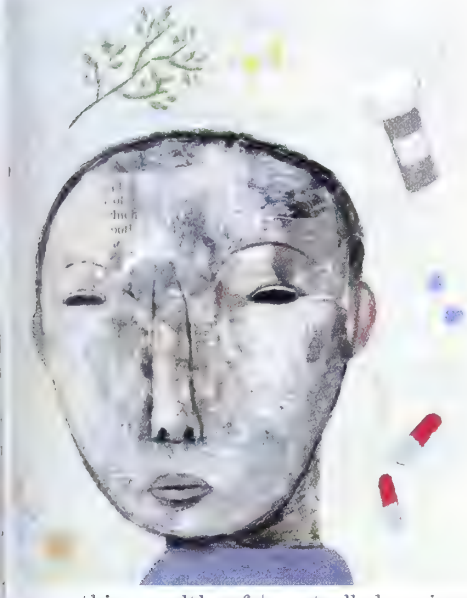
Only controlled experiments or clinical trials establish definite causal links. Still, a study's size and duration may greatly affect how dependable its findings are. "Giving 10 people a pill for two months is hardly going to provide solid evidence of its effectiveness," says Dr. Cynthia Mulrow, director of the San Antonio center of The Cochrane Collaboration, a nonprofit organization that analyzes and compiles medical research. The headline-grabbing research on the weight-loss drug leptin was a six-month study involving just 123 people, and the program was complete[illegible] only 76% of its 60 obese s[illegible]ects.

Meanwhile, don't g[illegible] too excited if the researc[illegible]as conducted on lab animals[illegible]s were the highly publici[illegible] studies of drugs that erad[illegible] cated cancerous tumors i[illegible] mice. Treatments that work very well in animals often have no effect on humans. Even studies with human subjects may not be relevant if the subjects differ markedly from you in age, ethnicity, gender, or health status.

Also look closely at the reported health outcome. Research published last month in JAMA suggests that individuals who take the cholesterol-lowering drug lovastatin have a 37% lower risk of developing a serious symptom of heart disease, such as chest pain. But the study does not show that the drug reduces the likelihood of death or hospitalization or even makes people feel better.

You can try to evaluate studies yourself by accessing them directly in the top medical journals, which are available online. They subject studies to rigorous scientific review by three or more experts before publication. You should check sources such as The Cochrane Collaboration to get a sense of the number of studies conducted on a given topic, and which direction the weight of the medical evidence is leaning. These days, you have to do some spadework to get the real story behind news reports of the latest medical miracle. *Kate Murphy*

HEALTH



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WORTH NOTING

■ **IRA CONVERSIONS.** Congress giveth and Congress taketh away, as witness the latest tune-up for the Roth Individual Retirement Account. In "technical corrections" likely to become law in mid-July, Congress is tinkering with rules that could affect IRA owners thinking of converting old accounts to Roth IRAs. Roth IRAs don't give a tax break on deposits but allow both deposits and earnings to be withdrawn tax-free in retirement.

The bill will create an escape hatch for investors who switch. Conversions are barred for those who earn over $100,000, which discourages people who can't predict their income. Now, if savers convert an IRA, then find at yearend that their income exceeds the cap, they can switch back with no penalty. They must reverse the conversion by the due date of their tax return.

Congress also wants to close a loophole that would have let IRA owners convert accounts to Roth IRAs, then withdraw the funds without a penalty. Such conversions, as with other Roth accounts, will be subject to a 10% penalty on funds withdrawn less than five years after the IRA is set up. *Mike McNamee*

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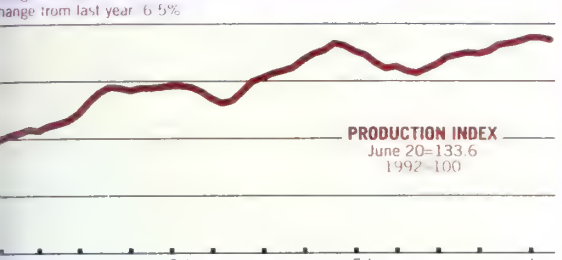
usiness Week Index

DUCTION INDEX

hange from last week 0.1%
hange from last year 6.5%



June 1997 | Oct. 1997 | Feb. 1998 | June 1998

e index is a 4-week moving average

oduction index fell in the week ended June 20. The unaveraged index ipped, to 132.3, from 133.6. After seasonal adjustment, both auto and production plummeted 10%, as the UAW strike at GM's Flint, Mich. has brought company-wide production to a stand-still. Cumulative output at General Motors topped the 100,000-vehicle mark this week. Output el, oil, coal, and rail freight were also down. Electricity and lumber tion posted small gains.

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DING INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
PRICES (6/26) S&P 500	1133.20	1100.65	27.7
RATE BOND YIELD, Aaa (6/26)	6.53%	6.49%	-11.3
SUPPLY, M2 (6/15) billions	$4,192.2	$4,183.7r	7.4
L CLAIMS, UNEMPLOYMENT (6/20) thous.	364	330r	10.3
AGE APPLICATIONS, PURCHASE (6/26)	241.3	274.6	16.0
AGE APPLICATIONS, REFINANCE (6/26)	1,202.7	1,406.2	184.7

s: Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage Assn. (Index: March 16, 1990=100)

REST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
IL FUNDS (6/30)	7.06%	5.36%	6.24%
RCIAL PAPER (6/30) 3-month	5.51	5.50	5.64
ICATES OF DEPOSIT (7/1) 3-month	5.60	5.60	5.67
MORTGAGE (6/26) 30-year	7.07	7.08	7.81
TABLE MORTGAGE (6/26) one-year	5.78	5.83	5.88
(6/26)	8.50	8.50	8.50

Federal Reserve, HSH Associates, Bloomberg Financial Markets

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (6/27) thous. of net tons	1,888	2,067#	-8.3
AUTOS (6/27) units	81,883	96,798r#	-25.1
TRUCKS (6/27) units	93,805	103,867r#	-21.2
ELECTRIC POWER (6/27) millions of kilowatt-hrs.	77,400	70,713#	6.3
CRUDE-OIL REFINING (6/27) thous. of bbl./day	15,333	15,443#	2.3
COAL (6/20) thous. of net tons	20,689#	21,279	3.4
LUMBER (6/20) millions of ft.	486.0#	494.9	0.1
RAIL FREIGHT (6/20) billions of ton-miles	26.8#	27.5	3.1

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPA1, SFPA2, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (7/1) $/troy oz.	296.800	293.850	-10.7
STEEL SCRAP (6/30) #1 heavy, $/ton	135.50	135.50	-2.2
COPPER (6/26) ¢/lb.	78.2	77.7	-33.0
ALUMINUM (6/26) ¢/lb.	63.8	63.5	-15.3
COTTON (6/27) strict low middling 1-1/16 in., ¢/lb.	75.55	73.04	4.7
OIL (6/30) $/bbl.	14.05	14.16	-29.1
CRB FOODSTUFFS (6/30) 1967=100	233.81	240.00	-1.5
CRB RAW INDUSTRIALS (6/30) 1967=100	296.20	296.84	-11.7

Sources: London Wednesday final setting, Chicago market, *Metals Week*, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (7/1)	138.28	141.13	114.41
GERMAN MARK (7/1)	1.82	1.80	1.75
BRITISH POUND (7/1)	1.66	1.67	1.67
FRENCH FRANC (7/1)	6.10	6.04	5.91
ITALIAN LIRA (7/1)	1790.2	1774.2	1705.8
CANADIAN DOLLAR (7/1)	1.46	1.47	1.38
MEXICAN PESO (7/1)[3]	8.941	8.932	7.947
TRADE-WEIGHTED DOLLAR INDEX (7/1)	113.3	113.5	103.7

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

ta in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense t. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

HE WEEK AHEAD

E SALES

July 6 ▶ Sales of cars and light robably added up to an annual rate million for June, says the median of economists surveyed by Stan- oor's MMS, a division of The Hill Companies. Although Chrysler d General Motors Corp. will release es earlier in the month, the final not be calculated until Ford Motor ts on July 6. In May, motor-vehicle reased 5.2% to a 16.2 million anks in part to rebates and other entives. Car-buying accounted for ter of the 0.4% gain in real con- ending in May. After such a runup, s were expected to be softer. Plus, the ongoing strike at GM probably held back sales as dealers ran out of some of GM's more popular models.

INSTALLMENT CREDIT

Wednesday, July 8, 3 p.m.EDT ▶ Consumers probably added about $4 billion more in debt than they paid off in May, says the S&P MMS forecast. That's below the $5.5 billion taken on in April, and even less than the $4.7 billion averaged each month in the first quarter, when consumer spending jumped at a 6% annual rate. However, the strong showing of vehicle sales in May suggests that installment credit, which includes auto loans, may have increased more than the median forecast.

PRODUCER PRICE INDEX

Friday, July 10, 8:30 a.m.EDT ▶ Producer prices of finished goods were probably unchanged in June, says the S&P MMS forecast. Excluding the volatile food and energy components, core producer prices most likely edged up just 0.1% last month. In May, total producer prices increased 0.2%, as did core prices. Prescription drugs posted a surprise 10.7% increase. In addition, tobacco products also were more expensive, and gas prices started to turn around in May. Food also will begin to post some steep price increases in coming months. In particular, dairy prices are rising. However, total producer prices are still below where they were a year earlier.

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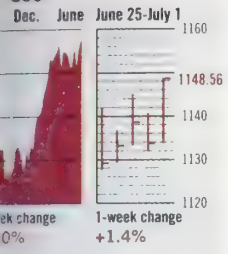


MENTARY

Street wrapped up the sec- uarter with small gains for . The Dow industrials fin- up 1.7% and the Stan- & Poor's 500, 2.9%. Not but still good considering ıst a few weeks ago, many ors thought stocks would the second quarter in the olumn. And on July 1, the er quarter got off to a start with the Dow gain- points and the S&P 500 a new high of 1148.6. In st week especially, U.S. have been helped by high- es in Asia and the hope ose battered markets have turned around.

U.S. MARKETS	Latest	% change Week	Year
Dow Jones Industrials	9048.7	1.4	16.1
NASDAQ Combined Composite	1914.5	2.0	31.5
S&P MidCap 400	365.7	2.3	25.4
S&P SmallCap 600	192.9	2.2	19.1
S&P SuperComposite 1500	244.3	1.5	26.6

SECTORS	Latest	% change Week	Year
Bloomberg Information Age	355.5	0.9	31.6
S&P Financials	139.1	2.0	34.0
S&P Utilities	247.7	1.4	23.4
PSE Technology	350.0	1.8	20.8

FOREIGN MARKETS	Latest	% change Week	Year
London (FT-SE 100)	5919.9	2.0	24.6
Frankfurt (DAX)	5906.9	2.2	53.2
Tokyo (NIKKEI 225)	16,362.9	8.2	–19.0
Hong Kong (Hang Seng)	8543.1	3.0	–43.8
Toronto (TSE 300)	7366.9	1.4	12.5
Mexico City (IPC)	4422.1	1.0	–3.0

FUNDAMENTALS	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.38%	1.40%	1.82%
S&P 500 P/E Ratio (Last 12 mos.)	27.1	26.3	22.6
S&P 500 P/E Ratio (Next 12 mos.)*	21.9	21.7	17.8
First Call Earnings Revision*	–1.91%	–1.27%	NA

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 200-day average	1022.7	1017.5	Positive
Stocks above 200-day average	48.0%	44.0%	Neutral
Options: Put/call ratio	0.50	0.61	Negative
Insiders: Vickers Sell/buy ratio	2.05	2.18	Neutral

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS	Last month %		Last 12 months %
Computer Software	22.6	Specialty Appar. Retailers	108.7
Communications Equip.	18.0	Broadcasting	95.2
Broadcasting	15.9	Homebuilding	82.5
Homebuilding	14.6	Automobiles	79.1
Airlines	14.6	Airlines	77.3

WORST-PERFORMING GROUPS	Last month %		Last 12 months %
Machine Tools	–15.5	Metals	–43.9
Oil & Gas Drilling	–12.3	Gold Mining	–27.0
Specialty Chemicals	–8.2	Oil & Gas Drilling	–26.7
Hospital Management	–7.9	Engineering & Constr.	–18.9
Hotels & Motels	–7.6	Leisure Time	–16.8

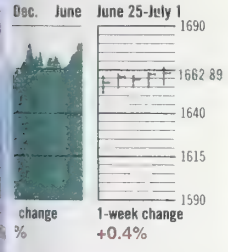
BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness	Price	1-month change
Citicorp	149 1/4	–3 3/4
IBM	114 13/16	–2 3/8
AT&T	57 1/8	–1 15/16
J.P. Morgan	117 1/16	–7
Bell Atlantic	45 5/8	–1 11/16
Mobil	76 5/8	–3/4

Decline ahead? Stocks with most significant selling on price strength	Price	1-month change
Intel	74 1/8	6 1/8
WorldCom	48 7/16	3
Microsoft	108 3/8	24 5/8
Cisco Systems	92 1/16	18 1/2
Dell Computer	92 13/16	14 1/2
Qwest Communications Intl.	34 7/8	2 7/8

REST RATES

SURY BOND INDEX



omberg Financial Markets

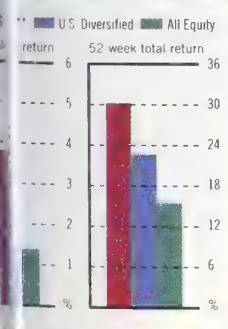
KEY RATES	Latest week%	Week ago%	Year ago%
MONEY MARKET FUNDS	5.10	5.09	5.17
90-DAY TREASURY BILLS	5.09	5.04	5.18
6-MONTH BANK CDS	5.05	5.06	5.19
1-YEAR TREASURY BILLS	5.34	5.41	5.64
10-YEAR TREASURY NOTES	5.43	5.46	6.45
30-YEAR TREASURY BONDS	5.62	5.66	6.74
LONG-TERM AA INDUSTRIALS	6.23	6.27	7.22
LONG-TERM BBB INDUSTRIALS	6.73	6.73	7.61
LONG-TERM AA TELEPHONES	6.63	6.61	7.47

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond		30-yr. bond	
	Latest week	Last week	Latest week	Last week
GENERAL OBLIGATIONS	4.39%	4.39%	4.95%	4.93%
PERCENT OF TREASURIES	80.88	80.45	87.99	87.19
TAXABLE EQUIVALENT	6.36	6.36	7.17	7.14
INSURED REVENUE BONDS	4.56	4.56	5.18	5.17
PERCENT OF TREASURIES	84.01	83.57	92.07	91.44
TAXABLE EQUIVALENT	6.61	6.61	7.51	7.49

AL FUNDS



ningstar, Inc.

EQUITY FUNDS

Leaders Four-week total return	%	Laggards Four-week total return	%
ProFunds UltraOTC Investor	26.7	Lexington Troika Russia	–22.4
Amerindo Technology D	19.9	Guinness Flgt. Asia Sm. Cap	–15.6
Managers Capital Apprec.	16.9	GMO Emerging Markets III	–14.7
TCW/DW Mid-Cap Equity A	16.3	Pioneer India C	–14.2
Potomac OTC Plus	15.9	Newport Tiger Cub B	–12.2

Leaders 52-week total return	%	Laggards 52-week total return	%
United Science & Tech. A	92.9	Matthews Korea I	–69.3
Transamerica Prem. Ag. Gr.	77.1	Lex. Crosby Sm. Cap Asia	–64.7
United Income A	72.5	Montgomery Emerg. Asia R	–63.5
Transamerica Prem. Sm. Co.	72.0	Guinness Flgt. Asia Sm. Cap	–62.7
Weitz Hickory	62.0	Lex.Troika Dialog Russia	–62.4

EQUITY FUND CATEGORIES

Leaders Four-week total return	%	Laggards Four-week total return	%
Technology	7.7	Diversified Emerging Mkts.	–7.9
Communications	7.0	Pacific/Asia ex-Japan	–7.3
Large-cap Growth	6.6	Precious Metals	–6.6
Mid-cap Growth	6.2	Latin America	–6.4
Small-cap Growth	4.7	Natural Resources	–3.6

Leaders 52-week total return	%	Laggards 52-week total return	%
Communications	37.2	Pacific/Asia ex-Japan	–52.9
Financial	34.8	Diversified Pacific/Asia	–41.8
Large-cap Growth	31.1	Precious Metals	–35.7
Europe	29.3	Diversified Emerging Mkts.	–33.5
Large-cap Blend	26.1	Japan	–26.8

s of market close Wednesday, July 1, 1998, unless otherwise indicated. Industry groups 500 companies only. Fundamentals, technical indicators, Bloomberg money flow analysis, and mutual fund returns are as of June 30. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

CHARTS BY ALBERTS MENA BW

ASIA: ONE YEAR LATER

On the first anniversary of Asia's worst recession in half a century, it is clear that the geoeconomic shape of the Pacific Rim will be far different from what anyone anticipated just a year ago. The fulcrum of growth is slowly shifting from a senescent Japan and stagnant Southeast Asia to a dynamic, confident China. President Clinton's remarkable journey will likely mark this tectonic shift for future histories. Consider these events taking place:

■ China is choosing a strategy of pumping up domestic-led economic growth, in contrast with the International Monetary Fund's policy of austerity and Japan's weak yen-and-export push. By cutting interest rates, privatizing housing, inviting foreign investment, and keeping the renminbi stable, Beijing is increasing domestic demand and growth. Certainly, China shares many of the woes afflicting Asia—insolvent banks, lax regulatory enforcement, and corruption. Yet its vigor in attacking these problems and its decision to opt for a strong currency set it apart and show real leadership.

Clinton's televised debates with President Jiang Zemin and Beijing University students over the utility of American-style freedom in the Information Age may well signal a new openness in China's polity. Human rights are still a huge problem. But the country has moved from totalitarianism to a looser form of authoritarianism. The hope is that China will follow Taiwan and Korea down the road to democracy.

■ Japan, in contrast, is stuck in a hermetically sealed society. Despite the rhetoric of reform, its political and bureaucratic elites deny there is anything basically wrong and run the country as a pension state focused on an aging population. Problems are described as isolated, and solutions take an inordinate amount of time. Seven years into a severe banking crisis, Tokyo is just now passing legislation to create a Resolution Trust Corp.-type unit. Meanwhile, the ployment rate soars to new records. Among men, wh stitute most of the labor force, it hit 4.3% in May worse for the young. The jobless rate for men 15 years old rose to 8.4%.

Foreign investment should be pouring in to reinvi growth, but little is allowed. Mergers and acquisitions be consolidating companies, but few are permitted. grants should be arriving to give new life to societ support the elderly, but they are forbidden. Outside should be taking over failing corporations, but that is cepted. As much as China is invigorated, Japan is stu The contrast is startling.

■ Southeast Asia is in agony. A huge nascent middle being pushed back into poverty. Depression is loomi donesia is deindustrializing, with people leaving cities turn to villages. Chinese merchants are fleeing (up to have left). Overseas Chinese capital that funded m Southeast Asia's past three decades of growth is dryi

■ IMF doctrine is being repudiated. Investor confiden not been restored a full year after the Asian crisis beg the IMF stepped in demanding high interest rates an fiscal restraint. A call for looser monetary policy, mo ernment pump-priming, and increased domestic gro spreading. Thailand and Korea have already cut i rates, along with Malaysia, China, and Hong Kong.

President Clinton got it right. His was not a boast hibition of American triumphalism but rather a forceful ment of American principles. The changing shape requires a strong U.S. foreign policy that promotes A values, strategic interests, and economic well-being. context, China's efforts to modernize deserve U.S. su

GM'S CHANCE TO GET IT RIGHT

Is General Motors Corp. finally going to do what it should have done 10 years ago? Will this strike spur it to close excess manufacturing capacity, dump tired brands, and trim bloated bureaucracy? Will the United Auto Workers end its self-destructive opposition to work-rule changes and parts outsourcing that are absolutely needed to boost productivity? History says no. This time, we hope, will be different.

GM once held over half of the U.S. vehicle market, but that is down to 31%. Even after closing factories during the recession of the early 1990s, the company has 50% more assembly plants than Ford Motor Co. but only 25% more market share. It has twice as many brands. GM simply has to cut back.

But that's not the worst of it. GM is the most vertically integrated of all the world's major auto companies, buying spark plugs and other low-tech components from its own Delphi and Delco operations. Other carmakers are assembling entire exhaust, transmission, and other auto systems from suppliers that design and build them. The UAW, fearing in membership, is fighting outsourcing tooth and nail, must sell its parts operations and speed up plans to bu ally. The UAW fiercely resists changing workplace r well. GM has local agreements that allow employees t quotas and go home early or work a second job. That'

GM's management shares much of the blame. Ba sions, such as the one to starve Saturn of funds fo sport-utility vehicle and a minivan, have hurt the c and curbed job growth. Even worse, since 1992, GM's management ranks have increased 47%, while Ford dropped by 37%. Not good.

Opportunities often pop up at unexpected times. T rent strike was not supposed to develop into a tot down, but it did. GM: *carpe diem.*

July 20

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BusinessWeek

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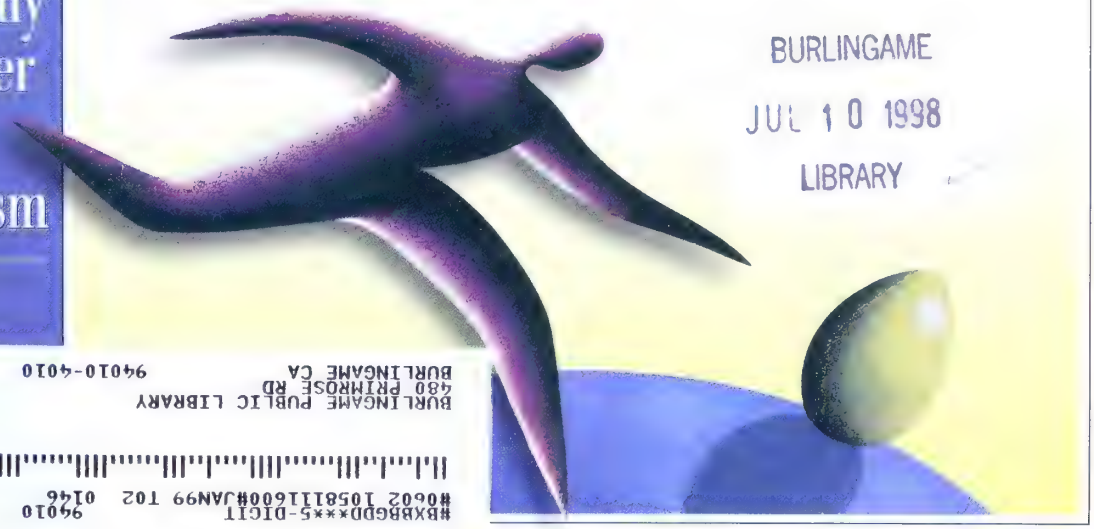
HOW TO RETIRE

Strategies for retiring **LATER**, investing **SMARTER**, and living a more **ACTIVE** lifestyle PAGE 74



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BusinessWeek
JULY 20, 1998

SPECIAL REPORT

HOW TO RETIRE

The rules aren't as simple as they used to be. But the opportunities are greater than ever

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Special Report

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Up Front

EDITED BY ROBERT McNATT

TALK SHOW "I got on him and rode him 100 yards and never looked at another horse"

—the late Roy Rogers, commenting on his first meeting with Trigger

SILICON CULTURE

WAKE UP AND SMELL THE JOB OFFER

SUN MICROSYSTEMS IS SO thirsty for high-tech workers, it's seeking recruits among Silicon Valley techies who are really wired: coffee-drinkers. In an effort to catch their bloodshot eyes, Sun has taken to advertising job opportunities on disposable coffee cup holders in local coffee shops.

Sound like Java gone amok? Not for an industry strapped for software programmers. "Recruiting is so difficult right now. We're trying to get word of mouth going about Sun," says Heidi Crozer, spokeswoman for Sun's Solaris division. Sun is putting its logo on "java jackets"—cardboard cup holders that invite potential applicants to visit Sun's Web site. Thirty of the California-based Noah's New York Bagels stores have strapped them around cups of coffee since May.

But in its campaign, Sun, developer of the Java programming language, does more than reach out to java junkies. It also takes a swipe at rival Microsoft, which has traditionally played the heavy in Sun's advertising. The cup holders proclaim: "Declare your independence"—encouraging workers and customers to "think outside the [Microsoft] box," says Crozer. Outside the box, and now, outside the cup, too. *Tammy Reiss*

D'AMATO: *For once, ahead in the polls*

CAMPAIGN '98

A SMOOTH ROAD FOR SENATOR POTHOLE

NEW YORK SENATOR ALFONSE D'Amato fancies himself the Comeback Kid of Empire State politics, a guy expected to lose elections but who still manages to win. Well, this year, the three-term Republican, dubbed Senator Pothole because of his constituent service, may need to get used to a different role: front-runner.

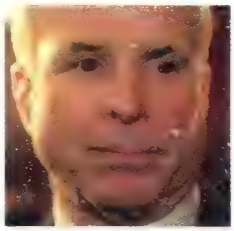
D'Amato's startling political resurgence is giving fits to Democrats, who have made the recapture of his Senate seat their No. 1 priority this year. He has endured years of mediocre-to-poor ratings in the polls. For the first time this year, however, three major independent polls show D'Amato ahead of all his potential Democratic rivals: former Vice-Presidential candidate Geraldine Ferraro, Representative Charles Schumer, and New York City Public Advocate Mark Green.

The latest Mason-Dixon/PMR poll, for instance, gave D'Amato a three-point edge over leading contender Ferraro. Sobered Democrats credit his comeback, in part, to strong fund-raising and a canny choice of issues, such as a crusade against ATM surcharges. On such issues are political careers resurrected. *Richard S. Dunham*

TRANSIT TALES

EXPRESS TO PHOENIX, PLEASE

FLYING FROM WASHINGTON TO Phoenix is no big deal if you don't mind stopping in, say, Atlanta first. Senator John McCain (R-Ariz.) minds. The chair of the Senate Commerce Committee is pushing a bill to increase long-haul flights at Washington's Reagan National Airport, bringing direct flights to his hometown, Phoenix.



McCAIN: *Route critic*

But the plan is flying into opposition from business interests, which fear a drop in flights from areas closer to the capital. Why? Because airlines prefer more profitable long hauls to short ones, they believe carriers may dump some short routes for new, longer ones. So bu groups from several E states are opposing th sure, as ar state trans tion secre Senator Bill (R-Tenn.), fears some to his state be at risk. s won't back t unless ex service stay

McCain says he only to foster competition a service won't be disr He vows not to fly fr tional to Phoenix, to sh sincerity. Remember: I then-House Speake Wright got nonstop to Dallas by adding lo flights at National. H the flights. *Lorraine W*

IPO WATCH

RECIPE FOR A *CORDON BLEU* CHIP

CHEF BERNARD LOISEAU IS cooking up a new recipe. The owner of Burgundy's La Côte d'Or, one of only 21 restaurants in France to earn three stars in the prestigious *Michelin Guide*, plans to go public this September in Paris. Loiseau hopes to raise as much as $8 million to expand his restaurant, hotel, and boutique, open a Paris bistro, and begin mail-order sales of a line of go foods and wines.

Loiseau's listing will first for a big-name chef—but probably n last. With the French my growing again, oth restaurateurs who st during the recession a ing similar steps to ex

Purveyors of luxury who go mass market, er, risk tarnishing thei tation through o "Some chefs have eve putting their names food," says Ale Lazareff, director of t tional Council for th nary Arts.

Nevertheless, the p payoff is too ap to resist. Says I "I compare m Christian Di fashion design sign haute coutur der to sell *prêt-à* so can *William E*

LOISEAU *and*

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Up Front

TOBACCO ROW

BIG TOBACCO: NOT SMOKING IN DIXIE

BIG TOBACCO MAY HAVE WON the latest round on Capitol Hill, but it's losing support—even in its traditional stronghold of the South. According to a recent poll by the Pew Research Center, cigarette makers can't muster majority support in any region of the country. And among Southerners, where support is strongest, only 36% side with tobacco in the industry's current battle with Washington, while 56% side with the government. That's astonishing. A year ago, when Southerners were asked a similar question—whether they favored a proposed tobacco settlement thought to hurt the industry—only 37% said they did, according to a CNN/*USA Today* poll.

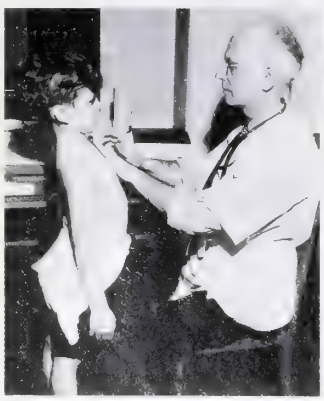
GAME PLAN: *Selling abroad*

"Even in the South, people see the personal implications of tobacco [usage], and they want government involvement," says Molly Sonner, an analyst at Pew.

Politically, Big Tobacco did best among GOP loyalists in the South, 48% of whom back it. But 60% of independent voters side with the government, reflecting the rise of independent voters in Southern cities and suburbs. They are more likely to mirror national trends. Big Tobacco's game plan? Keep selling cigarettes abroad, and hope that the antigovernment momentum that stopped the McCain bill will keep on growing. *Richard S. Dunham*

MEDICAL MARVELS

THE DOCTOR IS IN—THE PLANT



SAY "AH": *Quicker service*

WHEN A COMPANY'S PLANT IS stuck in the boonies with nary an HMO in sight, or it's in the big city with a second-rate health care plan, it needs a cure fast. Now there is one: hiring a firm to start a primary-care center at the plant.

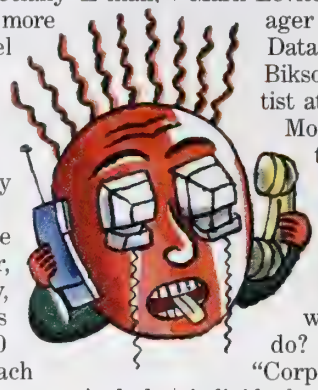
The medical equivalent of the company store is on the rise. Says Dr. David Kaplan, of benefits consultant Towers Perrin: "It's an alternative more and more companies are starting to explore." Corporate Health Dimensions (CHD) of Latham, N. Y., makes a business of setting up clinics. It runs one at the MGM Grand Hotel in Las Vegas—hardly a doctorless burg. Says CHD President Susan Mathews: "There's more interest because there's a disappointment in . . . managed care." And at a plant in rural Grand Island, Neb., farm-equipment maker New Holland North America teamed up with CHD and a local hospital to start a clinic that resulted in lower premiums and predictions of lower costs for New Holland. Now that's almost as good as the return of house calls. *Joan Oleck*

DRAWN & QUARTERED

I-WAY PATROL

YOU'VE GOT MAIL, AND MAIL, AND MAIL . . .

REMEMBER WHEN NEW GADgets made work easier? Well, that day may be over. With the deluge of messages from phones, pagers, faxes, snail mail, and especially E-mail, employees are more apt to feel headaches than happiness, says a new survey by Pitney Bowes.



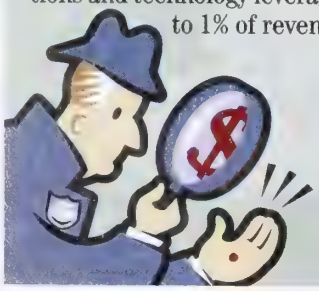
An average office worker, says the study, sends or gets an amazing 190 messages each day from all sources. And almost half of executives surveyed expressed difficulty dealing with that load.

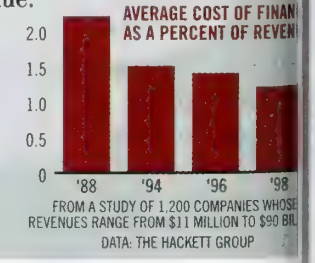
With 82 million business workers now using E-m something has to give, the experts. E-mail has potential for wreaking h on someone's workday," Mark Levitt, a research m ager at Internati Data Corp. Adds ' Bikson, a senior sc tist at RAND, the S Monica, Calif., t tank: "There pressure respond fa Waiting a is practic unheard of." what should do? Says Le "Corporate policy individual restraint are n ed to keep E-mail from m tiplying." Right—and E- a copy of this item to y boss. *Tammy K*

THE BIG PICTURE

THE CASE OF THE DISAPPEARING COSTS

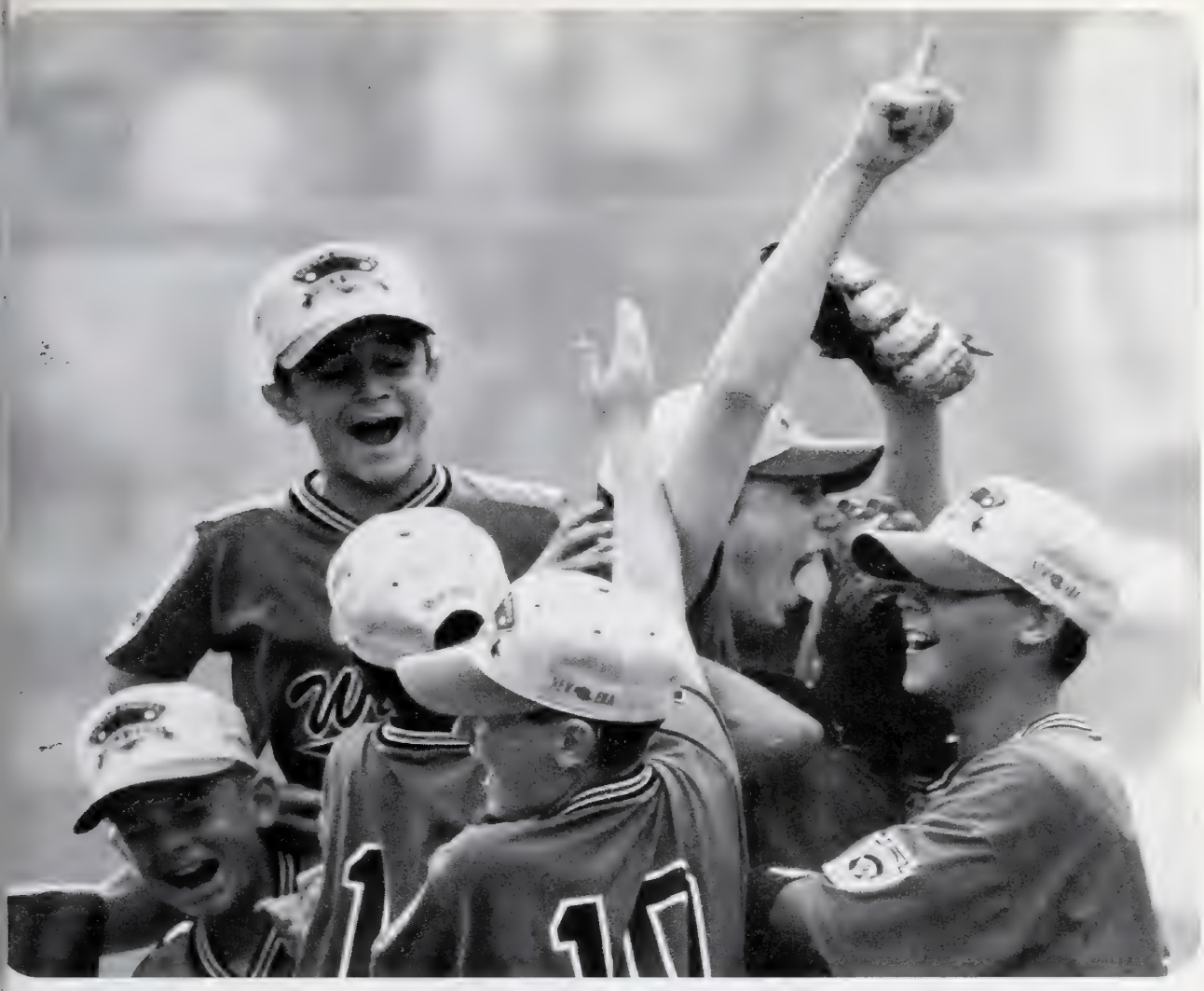
Companies' finance costs—back-office stuff such as accounts payable, payroll, budgeting, and tax planning—have dropped dramatically because of streamlined operations and technology leveraging. Predictions are for a dro to 1% of revenue.





FOOTNOTES U. S. adults who are aware of the World Cup, 74%; who know it's about soccer, 52%; who know it's in France; 2

DATA: HARRIS



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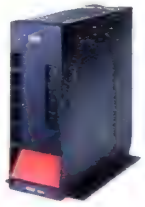

e-business tools

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Readers Report

SLINGS AND ARROWS FOR BARNES & NOBLE

"The baron of books" (Cover Story, June 29) about Barnes & Noble Chief Executive Leonard S. Riggio underscores an important issue that applies to many industries, not just bookselling. Current American thought equates the success of capitalism with the success of democracy. This thinking leads many to ignore the social consequences of '90s-style megabusiness.

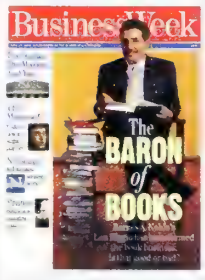
True democracy depends on even the smallest voices being heard. While it's true that industry consolidations may lead to lower prices and greater consumer choice in the short run, these positive effects are not guaranteed to last. The lessons that lead us to reject centralized government apply equally to societal domination by a few large "private" institutions. America's challenge during the next millennium will be to reap the positive economic benefits of emerging business models while preserving the spirit of individual liberty and choice that is the hallmark of a true democracy.

Hans M. Eckardt
Newport Beach, Calif.

I was saddened to see such unambiguous adulation. "He made bookstores fun"? In many cases, my friends and I have always found independent bookstores with selection, service, and character much more "fun" than Riggio's cookie-cutter boxes. While I concede that some Barnes & Nobles carry a larger selection than some independents, I do not concede that Riggio serves readers better than an independent bookstore. The booksellers at my favorite independent bookstores have talked with me about books for years. I trust them.

That the industry has not seen much increase in sales over the past 10 years tells me that Barnes & Noble, contrary to Riggio's claims, is not bringing l to the masses. If Barnes & Nob bringing more books to the masses, have so many publishers cut back midlists lately?

But the real hypocrisy in Rig claims is shown best by lookir where he opens stores. In Mass setts, Barnes & Noble popped the affluent towns of Brookline, C nut Hill, and Cambridge, where stores abound. Strangely, Riggio looked the Boston neighborhoo Dorchester and Roxbury, which both bookstores and a boost t economy. Riggio did this [because market already existed. He would



BARNES & NOBLE? FUN!

"My friends and I hav always found indepe dent bookstores with selection, service, ar character much mor 'fun' than Riggio's co ie-cutter boxes"

had to work a little harder to " books to the masses" in less wel neighborhoods.

Molly The
Brighton,

The saddest thing is Riggio's ment: "I don't shed a tear for the guy." It is the little guy who makes the most worthwhile cont tion to the world of literature. lustrate: In New Haven there is derful independent shop, The Fo Bookstore; its owner-proprietor, Berliner, watches out for quality ature. Back when I lived in Haven, I would walk into The Fo and Henry would greet me wi latest discovery. My whole hou thrived on what we called "J recommendations."

Now, I live in Phoenix, where are no general independent stores—just megastores like Bar

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and Borders. They are very cold indeed.

Louis H. Silverstein
Phoenix

nes & Noble deserves to succeed e it quietly reaches out to help en and families in communities the country. It has led the charge alf of two community-based or-tions that are daily changing peo-ves.

years ago, I co-founded First a nonprofit organization that pro-new books to disadvanteged chil-In our earliest days, Barnes & joined the effort and has been at e at every stage. From Len Rig-Tom Tolworthy, the president of & Noble Bookstores, to the sales f every store, Barnes & Noble en a committed corporate part-d it has never asked for credit. & Noble organizes book drives, s its employees to undertake sub-l roles in community efforts, and s stores to host book parties for dest to reach children in the na-/ith the help of Len Riggio, we ovided new books to hundreds of ds of children and brought the f reading to families who have no n their homes.

Peter F. Gold, Chairman
First Book
Washington

joyed your article focusing on ggio's strategies. I wanted to ex-ny distaste for the American llers Assn. and other such orga-s that band together to fight market giants. I enjoy the & Noble stores, with their vast n and discount prices, and be-e ABA should thank Riggio for ng so many buyers who would erwise buy from a small, musty re that carries maybe 1,000 Instead, they fight him because e envious of his profits and cam-their spite with claims of Riggio profit-driven that lesser-known uld never survive in his stores.

Jordan Buser
Waltham, Mass.

uestion about it. Small, indepen-okstores struggle to compete large chains. But is it not the all walks of business? As co-ed-authors, and publisher of six short-run books, all written by urten to 12th grade public school and student-teachers, we can hat Barnes & Noble was willing y and sell them while the small dents refused to even take a look at them. Barnes & Noble does carry the works of small, non-mainstream presses.

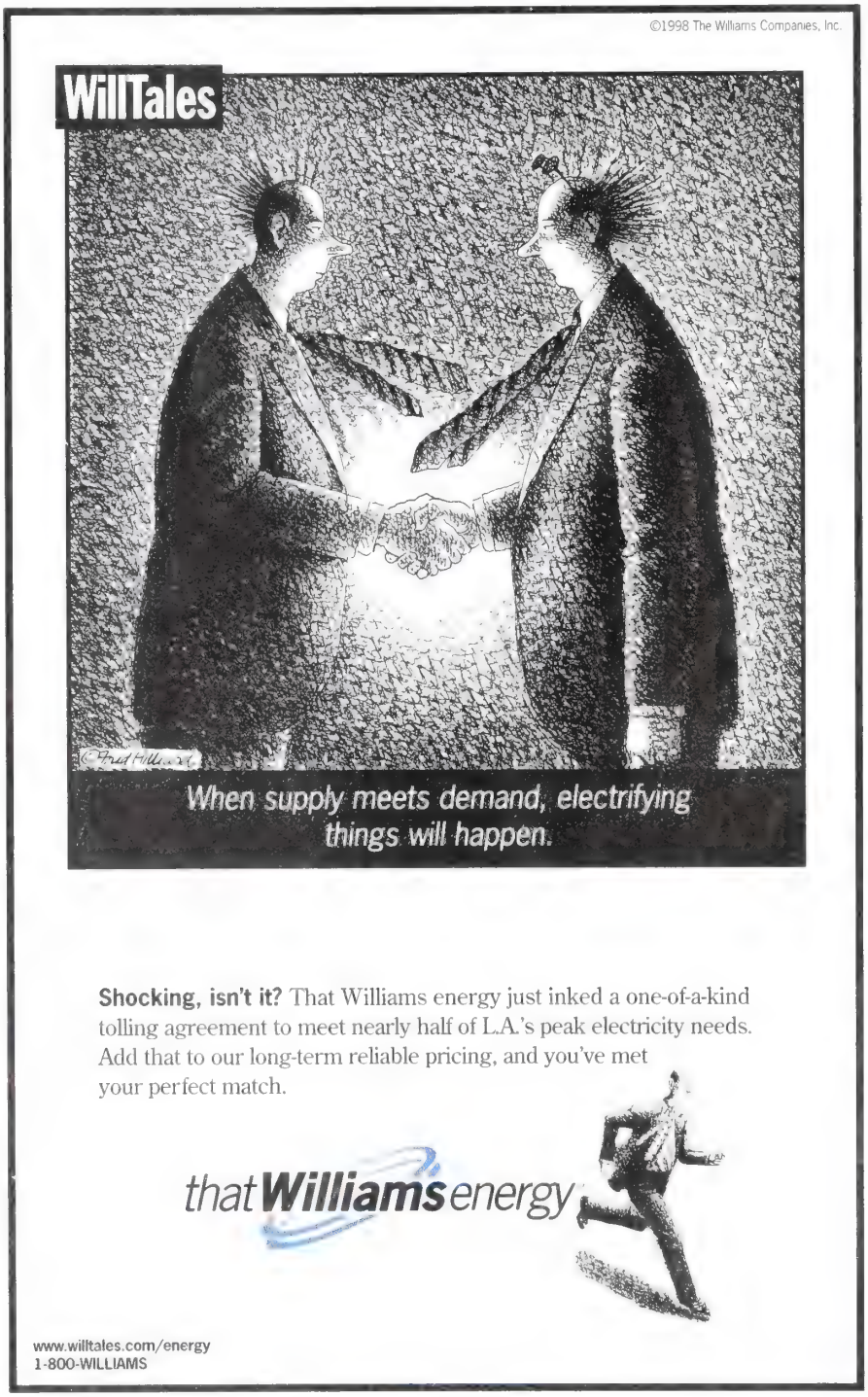
Carlos A. Bonilla, President
International Consulting Associations Inc.
Stockton, Calif.

CORRECTIONS & CLARIFICATIONS

The correct name of the publication cited in "Party stores are having a blast," (Marketing, June 22) is Party & Paper Retailer.

ONLY 24 TEAMS, PLEASE, IN MAJOR LEAGUE BASEBALL

Justin Catanoso's article, "Baseball should go where the money is" (Sports Business, June 29), addresses the salient problem affecting Major League Baseball (MLB): There are too many teams in markets where they are not viable, given the economics and the competition for talent coming from other sports. Still, his suggestion that teams move to big



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markets is only one part of the solution.

Why stop there? MLB should go from 32 teams to 24. It could subsidize a new and higher level of minor leagues, in which places such as Milwaukee, Pittsburgh, Montreal, and the Twin Cities could still enjoy high-caliber games. But with its high salaries and need to fill a park for 81 games, baseball has special economic demands. Putting franchises in Orlando, Nashville, or Charlotte, N. C., would only exacerbate the problem. Turning the game back into true "big leagues" will improve the quality of play, reignite interest, and reserve major league franchises for cities that can truly compete.

C. James Spellane
Washington

WHERE GOOD DOCTORS MAKE GOOD MANAGERS, TOO

Cancer care is provided by physicians, not facilities. More important, the cost of cancer care can best be controlled by physicians ("Bernie Salick's business is cancer," People, June 22).

In 1996, 75 New York doctors invested close to $3 million (less than 1% of Dr. Salick's planned investment) to capitalize their for-profit oncology network organization, Affiliated Physicians Network Inc. (APN). Their goal was to provide employers and managed-care organizations with a network of physicians who understand quality and cost effectiveness. APN now has more than 130 affiliated physicians—close to 20% of oncologists in private practice—and has initiated oncology risk contracting with Oxford Health Plans and other regional managed-care leaders.

While hospital systems and facilities battle for ego and for spending supremacy, the real force to be reckoned with is the group that has the ultimate responsibility and provides the care—its physicians.

Joseph A. Welfeld
President and CEO
Affiliated Physicians Network Inc.
Fort Lee, N.J.

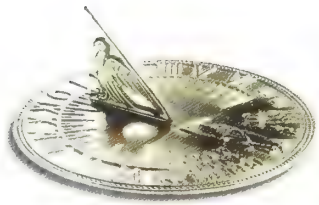
WAS AL DUNLAP A ONE-TRICK CEO?

In "At least Chainsaw Al knew how to hire a board" (News: Analysis & Commentary, June 29), John Byrne recognizes the importance of an independent board of directors to protect shareholder interests in all corporate situations. The case of Sunbeam Co illustrates another key point: name the distinction between a task-orient turnaround manager, who makes di cult decisions and stabilizes a mon losing business, and a people-orient growth manager, who defines a vis and builds a team to implement t plan. All too often, turnaround m agers believe (incorrectly) that th can become the growth manager.

Ron Gerber, Presid
Gerber &
New Y

SKILL SHORTAGES: DON'T FORGET COMMUNICATION

I agree that there is not necessa the scarcity that everyone is talk about as far as programmers and s ware developers go ("Is there a tec shortage?" The Workplace, June 29). as an entrepreneur who is managing own software company, I find that t overall skills are lacking. Some ca dates have the skills but not the c munication skills to survive a team p ject. The IT industry has created a uni hiring and firing culture. It has also ated a very temporary atmosphere



Nothing validates a consistent principle more t

anies large and small. Companies andidates need to change their ex- tions so that the result will be a ıier workforce in general.

Ban Saraf
Saraf Software Solutions Inc.
Alexandria, Va.

GOLDEN ERA OF SHOPPING? DREAM ON

"The digital bazaar" (Information ıology Annual Report, June 22),

you inform readers that "you also save a few bucks at cybershops that don't hit you with a local sales tax" and then you go on to mention New York's high sales-tax rate. Perhaps the cybershop won't tax you, but the state tax agency might. After all, there is a "compensating use tax" on the books in most states, requiring the buyer to pay the sales tax equivalent if the seller did not collect it. It's easy enough for the state to monitor Web sales—they are hardly confidential.

Thomas T. Semon
Englewood Cliffs, N.J.

The assertion that the balance of power shifts from businesses to consumers seems flawed. Despite the equalizing power of the Net, which allows small entrepreneurs to compete with big players, the economics of the Net are not primarily governed by the highest quality or lowest prices for the consumers. Even in the new world of E-business, some fundamentals remain unchanged: With the information explosion, the battle has intensified for the consumer's attention. Having seen many sophisticated consumers struggle with online interfaces, I think that it may take a while for the era of the "net savvy" consumer to arrive.

Meanwhile, most lay buyers are overwhelmed with the information overload and the array of choices available. It may be more apt to describe the "click here economy" as "click here, and click there, and there, and there economy." And if one has read the fine print on the Web pages, add before every click: "Caveat emptor."

Yogesh Malhotra
Chairman
Brint Research Institute
Pittsburgh

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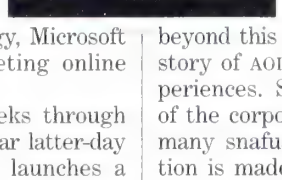
AMERICA ONLINE: OFTEN DOWN, NEVER OUT

On May 11, 1993, CEO Stephen M. Case of America Online Inc. found himself face to face with Microsoft Corp. Chairman William H. Gates III. AOL, then the third-largest online-service provider, had gone public only a year earlier, after some fairly rocky beginnings. Gates—the most powerful man in Corporate America—was telling Case in a deadpan tone: "I can buy 20% of you or I can buy all of you. Or I can go into this business myself and bury you."

The scene provides a dramatic opening for Kara Swisher's book *aol.com*. The company was "in constant danger," Swisher writes. "Innumerable challenges had given AOL a heart-rending roller-coaster ride all along the way." But despite its many missteps and regular predictions of its demise, the company and its ragtag band of executives somehow prevailed. AOL, based in Dulles, Va., is now the world's leading online service, with 12 million users, besting Gates's Microsoft Network, which has just over 2 million.

The adventures of AOL contain the raw material for a riveting tale. Swisher, who reports on Silicon Valley for *The Wall Street Journal*, does a good job recounting the company's turning points and depicting the assorted characters who led the way—from taciturn co-founder Case, now chairman and CEO, to the flamboyant, recently imported president, Robert W. Pittman. Regular AOL followers, though, may find the book offers few insights, despite the access the author got from the company starting in late 1996.

Swisher excels in relating the chronology of AOL's endless perils and occasional triumphs. Founded in 1982 in Vienna, Va., as Control Video Corp., the company initially planned to become an online computer-games service and then a maker of proprietary online services for Commodore International, Apple Computer, and Tandy—but that did not pan out. In 1991, when the 32-year-old Case became president, the company struck out on its own as America Online. It resisted the acquisition overtures from larger competitor CompuServe Inc., and it had a run of good luck when media giant Tribune Co. ponied up $5 million for a 9% stake. The next year, AOL—with 150,000 users, $20 million in revenues, and little profit—went public.



No sooner had AOL employees celebrated their Wall Street debut than more threats appeared on the horizon. First, Microsoft founder Paul G. Allen started accumulating AOL shares. Then, at the meeting with Case that was recounted at the book's beginning, Gates proposed that Microsoft should buy out AOL. When Case, now CEO, persuaded his board to back a go-it-alone strategy, Microsoft began developing a competing online service.

So it goes. The book treks through the rest of AOL's more familiar latter-day experiences. The company launches a bold membership drive, "March to a Million," mass-mailing 250 million free AOL software disks to consumers. The surge in users clogs AOL's system in February, 1994, earning the company its derogatory moniker "America On Hold." Two months later, AOL hits its 1 million goal.

Then, AOL survives Microsoft Network's 1995 launch, pulling a fast one to neutralize its foe by incorporating both Netscape Communications Corp.'s leading Navigator Web browser and Microsoft's Internet Explorer browser in the AOL service. In return, Gates agrees to place AOL's icon prominently on his Windows 95 operating system.

Meanwhile, new troubles develop even as AOL membership soars to 5 million in May, 1996. The company's stock tanks on the news that new users are leaving in droves. In one of the best revelations in the book, Swisher describes how desperate mid-level AOL execs even consider launching a premium-priced "adult-content" channel to retain members. State attorneys general investigate the company's allegedly unfair marketing practices. The Securities and Exchange Commission questions AOL's aggressive accounting.

In October, AOL announces unlimited-use, flat-rate pricing to keep members from defecting to cheaper Internet service providers. And its system is soon overwhelmed in the infamous busy-signal crisis, as subscribers increase usage from 1.5 million hours a day to 3 million hours. But at the same time, new AOL exec Bob Pittman puts in place a seemingly successful electronic-commerce strategy, signing multimillion-dollar deals with merchants such as CUC International and Amazon.com to sell their wares on AOL. And by September, 1997—with the busy-signal crisis behind it—AOL buys its old rival CompuServe and plucks every bit the triumphant cybersurvivor.

Swisher doesn't go much beyond this familiar saga to get the inside story of AOL's numerous near-death experiences. She provides little analysis of the corporate culture that led to so many snafus. And although brief attention is made of early tensions between Case and Pittman, the book leaves unexplored the turmoil that must have existed in the executive suites during these crises.

Still, *aol.com* is a faithful chronicle of the considerable surface drama of a surprising victor that continues to beat down challenges—such as the recent unsuccessful acquisition overture by AT&T. AOL's story is far from over, and this gives Swisher plenty of opportunity to return with Chapter Two of the cyberpioneer's capers.

BY CATHERINE A. YANG

Yang covers AOL for BUSINESS WEEK.

THE STORY OF AOL'S PERILS AND TRIUMPHS —BUT WITH FEW FRESH INSIGHTS

EPHEN H. WILDSTROM

JILD YOUR VN BROWSER

Microsoft is g consumers choices in surfing software

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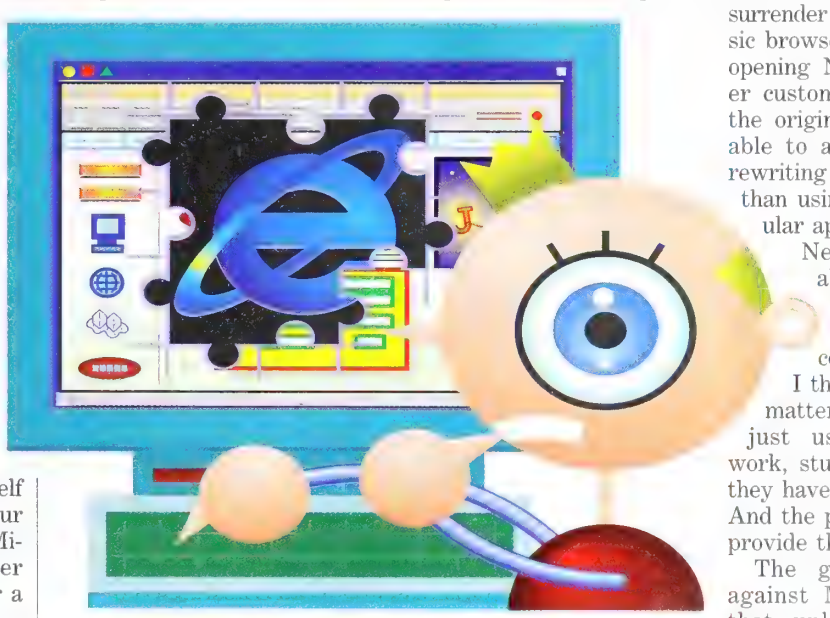

EXPLOSION Four new browsers have appeared based on Explorer; not bad for a dying segment

Leaving the hard work to Microsoft allows other developers to focus on the special features and unique look and feel that will distinguish their browsers. IBM's Lotus Development gave up on trying to write its own browsers and chose the IE platform for Notes 4.5. The result is a browser that works well and has a distinctive Notes look. The KidDesk Internet Safe browser from Edmark, another IBM division, is based on IE, as is MediaLive's Surf Monkey, another "kid safe" browser.

A second advantage comes in getting the product to consumers. Online distribution is an attractive way to ship Internet-based products, especially for smaller companies that struggle for shelf space. But long downloads frustrate consumers. Netscape Communications' Navigator browser requires a minimum 8 MB download—at least 45 minutes on a 33.6 kilobit-per-second connection. Because it uses IE components already part of Windows, Bigfoot's NeoPlanet browser is just 791 KB and can be downloaded in five minutes.

Microsoft archrival Netscape could benefit by using the Microsoft tools, since it could then focus its programming efforts on profitable server software. But Netscape, cherishing its independence, will continue writing browsers from scratch. Julie Herendeen, Netscape's director of client marketing, says that while it is technically feasible to use IE components, the company has no intention of doing so. The reason: By conceding fundamental design decisions to Microsoft, Herendeen says, Netscape "would no longer have a role in driving standards for the Internet. It's a good thing to have at least two major voices, and it's very important for Netscape to continue to be involved."

NO SURRENDER. Netscape will rely on other companies to supply the code to run Java in future browsers but won't surrender control over the basic browser. Netscape also is opening Navigator to greater customization by making the original programs available to any developer. But rewriting this code is harder than using Microsoft's modular approach.

Netscape has a point about the need for diverse views, but its significance to consumers is unclear. I think that what really matters to the folks who just use computers for work, study, or play is that they have meaningful choices. And the products built on IE provide those choices.

The government's case against Microsoft assumes that unless something is done, Internet Explorer will soon be the only browser. Microsoft may be guilty of anticompetitive behavior, particularly in the onerous licenses it imposed on computer makers and Internet service providers. And I hope many makers follow the lead of Gateway and NEC and ship Netscape on their machines. But the evidence suggests the design of IE should encourage, not kill, alternatives. In this area, at least, Microsoft is getting a bum rap.

QUESTIONS? COMMENTS? E-mail tech&you@businessweek.com or fax (202) 383-2125

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t Technologies

BY JEFFREY E. GARTEN

DAIMLER HAS TO STEER THE CHRYSLER MERGER

WHO'S BOSS? Unless Daimler imposes its culture on the new company and takes complete charge, don't be surprised if the deal fails

When Chrysler Corp. and Daimler Benz announced their megamerger two months ago—the largest international corporate marriage in history—it looked to be further evidence that globalization cannot be stopped. But unlike fluid flows of money and technology across borders, the links between companies of different nationalities can be quite brittle. Remember how Renault was unable to hang on to American Motors or how Matsushita had to disgorge Universal Studios? Unless tough decisions are quickly made to overcome deeply ingrained differences of strategy and culture, global combinations can easily fall apart. Indeed, the survival of the soon-to-be Daimler Chrysler is already at risk.

The new company will face massive challenges. Daimler Chrysler will still be only the fifth-largest car company, behind General Motors, Ford, Toyota, and Volkswagen. Its product line, ranging from an $11,000 Dodge to a $130,000 Mercedes, could foster a confused image and culture. The German corporate governance system in which labor and banks hold board seats in order to take a longer-term view could collide with the obsession of American shareholders with immediate returns. Compensation philosophies could be irreconcilable: Just compare Chrysler Chairman and CEO Robert J. Eaton's 1997 pay package of $16 million with that of Daimler chief Jürgen E. Schrempp's $1.9 million. And politically explosive decisions are sure to arise about how to apportion layoffs between America and Germany when downsizing occurs because of the overcapacity in the global auto industry.

A SLOW FUSE. To make this deal work, Daimler—which has been subtly identified by both parties as the controlling partner despite all the talk about this being "a merger of equals"—needs to take complete charge, quickly and decisively. But in public statements, both Eaton and Schrempp have gone to great lengths to underline the "evolutionary" process of integrating the two companies. This slow-fuse approach—joint CEOs for a few years; headquarters in both Stuttgart and Detroit; separate operations for engineering, manufacturing, and marketing—could unleash powerful centrifugal forces among competing departments.

In fact, Daimler ought to study another set of deals involving a high-profile takeover by an admired foreign company of p American assets: Sony Corp.'s acquisit both CBS Records Inc. and Columbia Pi in the late 1980s. Sony started off mista thinking that it could oversee its freewh American companies from afar and v light touch. It failed to put its own management structure in the U.S. glected to build links between Sony's A can subsidiaries on the two coasts. control of expenses, and by 1994, Son forced to take a $2.7 billion write-off.

But lessons were learned. The foll year a new president, Nobuyuki Idei, p Sony stamp on its U.S. operations. placed top management in America with ly professional U.S. executives, su Howard Stringer, former president Broadcast Group, who supported Sony dition of teamwork and its goals of integ its operations in the U.S. and arou world. Top Japanese executives were in New York and Los Angeles. Idei c the U.S. once a month to oversee the ness and to network with such Am counterparts as Bill Gates and Andy

Sony went from a loss of $1.8 bil 1995 to a pretax profit of $3.4 billion i helped in part by its enormous succes computer video games. A leader in the based digital revolution, Sony has eve shaled the resources of its music subsid New York, its movie business in Los A and its electronics expertise in Tokyo duce European movies in local languag of Germany.

Sony and Daimler are in differen nesses, of course, and no one blueprint to all big international mergers. But th successful global companies, such as ABB Asea Brown Boveri, and General E have put their unambiguous imprint their operations by imposing one stro porate culture with central manageme the most critical functions. Someone m ticulate overall philosophy and values tablish companywide investment pri Someone must set financial and oper performance requirements, compensati cies, and development paths for senio utives. Unless Daimler takes charge o kinds of tasks immediately, don't be su if the deal comes unwound. Announcin global merger is nothing compared to it succeed.

Jeffrey E. Garten is dean of the Yale School of Management. A former investment banker, he was Under Secretary of Commerce for International Trade in the first Clinton Administration (jeffrey.garten@yale.edu).

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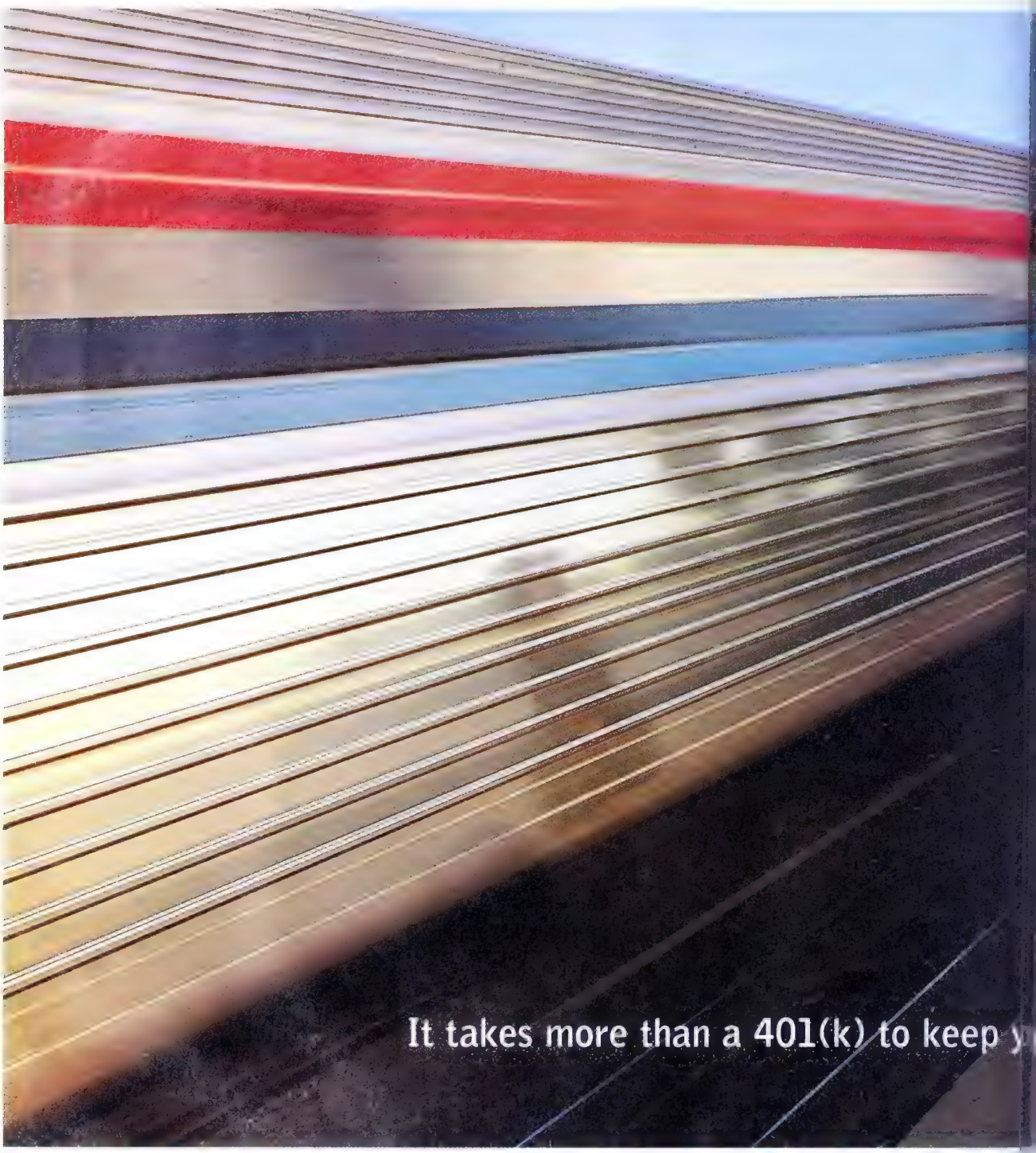

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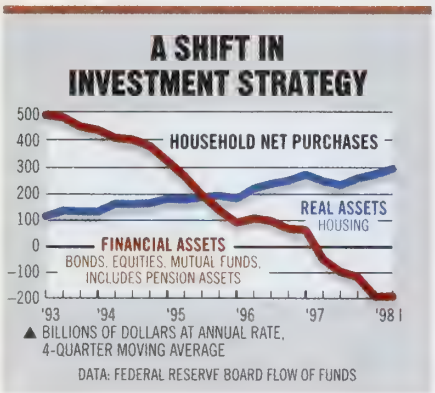
BY GENE KORETZ

AMERICANS TURN TO REAL ESTATE

As foreigners buy financial assets

At first glance, the infatuation of U.S. households with the booming financial markets looks as strong as ever. Beneath the surface, however, economist Joseph Carson of Deutsche Bank Securities spies a sea change that has substantial implications for the investment community.

Specifically, Federal Reserve flow-of-funds data indicate that it has been investors from abroad rather than Americans who have been the big net buyers



of U.S. financial assets over the past year or so. Last year, foreigners snapped up some $350 billion worth, and they have apparently stepped up the pace in 1998—providing vital liquidity that has helped keep the good times rolling on Wall Street.

In contrast, the Fed data reveal that U.S. households have actually become large net sellers of financial assets (chart). In fact, although they poured some $220 billion into mutual funds and even more into 401(k) plans last year, they sold such massive amounts of directly held stocks and bonds that total net sales of financial assets by households in 1997 ran close to $200 billion—a trend that shows no sign of slackening.

At the same time, observes Carson, the household sector has been directing more and more of its cash toward purchases of real assets, primarily housing. In 1997, new financial flows into residential real estate totaled $260 billion, and net flows into housing this year appear to be running some 25% to 30% faster.

As Carson sees it, people aren't redirecting their cash flows toward home purchases simply because incomes are up and mortgage rates are low. They're being drawn by relative valuation and potential aftertax returns. Back in 1982, the cost of buying 100 shares of each of the stocks in the Dow Jones industrial average was about 1.75 times the price of an average home. By the end of last year, the ratio was up to about 8 to 1—making home purchases seem dirt cheap in comparison to equities.

Similarly, Carson notes that existing home prices have recently been rising at a 6% annual clip—more than the yield on a five-year Treasury. And new tax laws, which allow homeowners to realize $500,000 worth of tax-free capital gains on home sales every two years, are a powerful investment incentive.

While these considerations suggest that households will be shifting capital toward hard assets for some time, Carson thinks that the direction of foreign investment is less predictable. Just as troubles in Asia and elsewhere have inspired flows into dollar assets, he says, recoveries in those areas could spark outflows, as could concern about America's widening trade deficit.

If such a reversal were sudden and large, the impact on U.S. financial markets could be traumatic. And that downside risk, compared to the lower risks in a housing market that has just begun to experience healthy appreciation, says Carson, may be one more reason that households are putting more of their new capital into real estate.

BANK MERGERS: WHO BENEFITS?

Certainly not the customer

Although the number of commercial banks in the U.S. fell from 13,123 in 1988 to 9,215 in 1997, there's still no end in sight to the banking industry's rapid consolidation. But is the merger wave beneficial to consumers?

Advocates claim that mergers produce efficiencies that lower costs and thus permit better service to customers. Skeptics worry that mergers allow banks to cut services because they now face less competition. A recent study by Katerina Simons and Joanna Stavins of the Federal Reserve Bank of Boston tends to support the latter view.

Drawing on nationwide data covering some 500 banks from 1985 to 1995, the two economists looked at how market concentration and mergers affected interest rates on customers' deposits. They found that merged banks actually tend to lower deposit rates in the w of a merger (but only in the first following the merger). More import while rivals of newly merged banks tially boost interest rates after merger—presumably to gain tomers—they subsequently lower r even more. Thus, their depositors out over the long term.

Why don't the merged banks fo the lead of their unmerged competi by lowering their interest rates the long term? The authors specu that service declines so much aft merger that merged banks have to slightly higher interest rates than t rivals to retain customers.

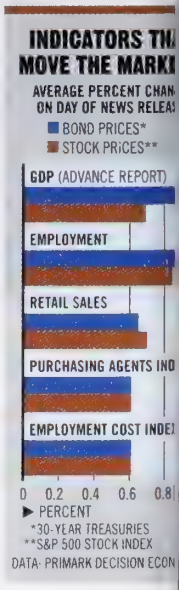
In any case, the study's overall clusion is that banks tend to pay lo interest rates in markets that bec more concentrated. And that, say authors, is something that antitrust ulators need to look at more closely

ECONOMIC NEWS THAT ISN'T NEWS

How Wall Street eyes the data

While it's well known that the lease of an economic indicator have an immediate—and sometimes matic—impact on the financial mark David Kelly of Primark Decision nomics points out that some are more potent than others. In a re study, he looked at how stock and b prices reacted to various data rele from 1994 through March of this ye

Of 16 indicators analyzed, rep Kelly, only a half-dozen or so seem important for the markets, including employment, the advance report on GDP, retail sales, the employment cost index, and the purchasing managers index (chart). Looking at both markets together, the most powerful price mover was the monthly employment report. Not surprisingly, the least important was the final report on quarterly GDP, which is issued three long, d filled months after a quarter has en



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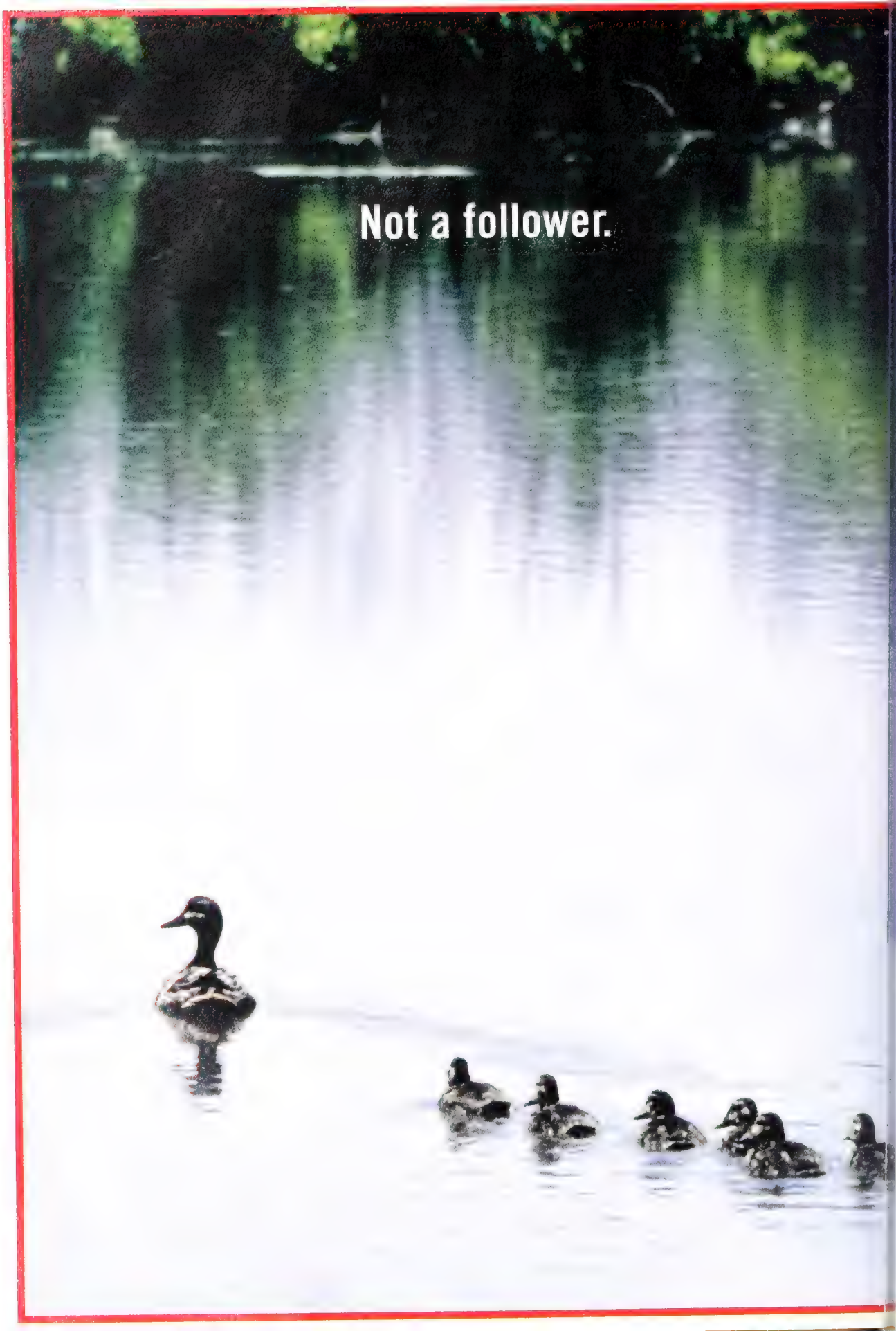
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AMES C. COOPER & KATHLEEN MADIGAN

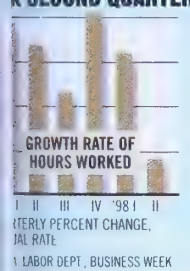
AS THAT A SPEED BUMP R SOMETHING BIGGER?

slowdown is real, but its staying power is hard to gauge

U.S. ECONOMY How weak was second-quarter economic growth? Based on so far, the economy's performance last quarter he poorest in a long time, with a growth rate of ibly less than 2%. In fact, given some not far-ed assumptions about key components, such as tories and foreign trade, a case can be made that th was zero. The key question, however, is: Was econd-quarter slowdown the start of a lasting shift that will extend through yearend?

st economists believe that it is. On average, the 50 asters surveyed by *Blue Chip Economic Indica-* ook for growth in real gross domestic product of the second quarter, and they expect the economy e by 2.2% in the third quarter and 2.5% in the . The economists are betting that the Asian crisis ontinually widen the trade deficit and create the for an inventory adjustment that will last until nd. The expected cooler pace would follow six ers of growth that averaged a scorching 4.1%, rongest such period since the mid-1980s.

I KEY SIGN OF A K SECOND QUARTER



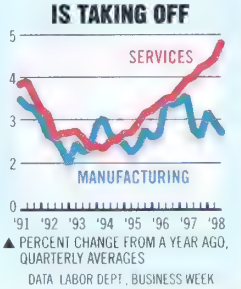
But will it work out that way? The Asian recession has created not one but two dichotomies in the U.S. economy that are muddying the analytical waters. First is the dichotomy between weakening foreign demand and persistently robust domestic spending. Second is the related split between the trade-sensitive goods-producing sector and es, which are far more immune to the Asian flu. negative impact from Asia on U.S. trade and facturing is undeniable. But on balance, there is ttle, if any, evidence that those shocks are mi-g to domestic demand and the service sector. in mind that services account for more than half , 80% of nonfarm jobs, and 70% of the core con- price index, excluding energy and food. Any slowdown in the overall economy will have to be er than the one last quarter.

JUNE EMPLOYMENT REPORT illustrates the ng forces underlying the second quarter's softness). Overall hours worked by nonfarm employees t an annual rate of 0.8% last quarter, a steep dropoff from recent quarters. Total hours worked are a good proxy for overall economic activity, but what really happened last quarter was that hours worked in factories plunged at a 4.1% annual rate, while work time in services rose at a healthy 2.4% pace.

The weakness in manufacturing shows up in shrinking payrolls and a shorter workweek. Factory jobs fell 29,000 in June, after a 22,000 loss in May. Factory payrolls have fallen in four of the past five months, and the workweek stayed at 41.8 hours in June, after hitting a record of 42.2 hours in December.

The strike at General Motors Corp. and its secondary consequences will further cloud the view of Asia's effect on the economy this summer, because the strike will show up in a variety of data, including employment, industrial production, purchasing managers' surveys, unemployment claims, and eventually car sales as stocks dwindle. The June data were only marginally affected, but the July reports will show the full brunt, including losses of more than 150,000 jobs.

WHERE WAGE GROWTH IS TAKING OFF



▲ PERCENT CHANGE FROM A YEAR AGO, QUARTERLY AVERAGES

DATA: LABOR DEPT., BUSINESS WEEK

SERVICE-SECTOR PAYROLLS, however, are surviving the Asian mess largely unscathed. Despite the manufacturing job losses, overall June jobs still rose a solid 205,000, led by a gain in service-sector employment of 215,000. In the first half of 1998, monthly increases in service jobs averaged 227,000, only slightly less than the 244,000 a month in the second half of 1997.

The bifurcation between goods and services is especially clear in recent patterns of wages and prices. While annual wage growth in manufacturing has fluctuated between 2.5% and 3.5% for the past four years, pay gains in the service sector have gone straight up, from 2.5% in 1994 to 4.8% in the second quarter (chart). That is the fastest clip in 15 years, and far in excess of possible productivity gains. As for consumer prices: Excluding the ups and downs caused by energy and food, core inflation for goods remains barely above zero, but core service inflation, already at 3.1%, is showing signs of turning up.

In addition, overall job growth at June's pace is still fast enough to keep labor markets extremely

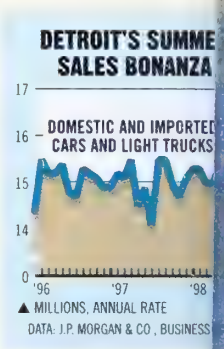
tight and wages growing even faster. That's especially true now that the labor force is growing more slowly than it had been, because the U.S. is starting to run out of job seekers. In the first half of 1998, the labor force grew at an annual rate of only 0.4%, the slowest pace in any half-year period in nearly three years. The unemployment rate rose to 4.5% in June from a 28-year low of 4.3% in April and May, but unless either labor-force growth picks up or employment growth slows, the jobless rate will head back down again in coming months.

THE SERVICE-LED STRENGTH in job growth and pay gains, along with very accommodating financial conditions, have underpinned domestic demand. Chief among the financial pluses is the ongoing decline in long-term interest rates to a new low in early July of 5.57% for the 30-year Treasury bond, not to mention the steady strength in stock prices. Early in the second half, these supports look as firm as ever, which is a key argument against a lasting slowdown.

For example, June car sales came on like gangbusters (chart). Sales of domestic and imported cars and light trucks hit a 16.7 million annual rate, even higher than the 16.4 million pace in May that most analysts had deemed unsustainable. To be sure, third-quarter buying will fall back, especially in July, if only because of a lack of GM cars, but also because incentive programs, which helped demand, ended on July 1. first-half sales far exceeded industry expectations

The Federal Reserve Board, especially, is ho the second-quarter slowdown is not temporary. Fed cautiously left interest rates unchanged at its 19 meeting, according to recently released min and again at its June 30-July 1 confab.

According to the May minutes, two policymakers voted against the decision, while others said the status-quo choice was a "close call." Asia was the key. Policymakers said that raising U.S. rates would threaten the stability of Asia's financial markets. However, the minutes also showed that many of the central bankers emphasized that such "market considerations could not be allowed to jeopardiz fective conduct of U.S. monetary policy."



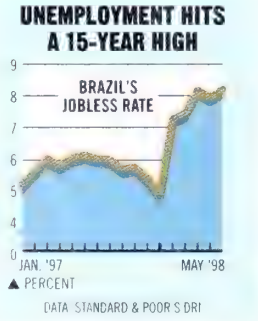
What is becoming clear is that strong domesti mand and a solid service sector are generating and price pressures that are being masked by Asian impact on exports and manufacturing. I second-quarter lull is lasting, those pressures will a But if growth picks up again, the Fed will face very tough choices by yearend.

BRAZIL

WALKING AN INTEREST-RATE HIGH WIRE

The crises in Asia and Russia have again raised questions about whether Brazil can support its currency, the real, and sustain its four-year-old stability plan.

The short-term outlook looks positive. Since the Central Bank doubled interest rates to 43% in response to the first Asian scare last October, hard currency reserves have soared from $52 billion to $72 billion. And the current account deficit, though still worrisome, should drop below 4% of the gross domestic product in 1998, from 4.2% last year.



But Brazil's longer-term picture is cloudier. Since late November, interest rates have been gradually cut, to 21% now. But the nominal fiscal deficit, at a hefty 6.5% of GDP, means that further rate cuts will be minimal. Real GDP grew just 1.1% in the first quarter from a year ago and is expected to rise about 1% the entire year. High interest rates could hold 1999 GDP growth to just 2%.

Unemployment is another growing concern (chart). The jobless rate hit 8.2% in May, up from 7.9% in April, and it would be considerably higher if the millions of workers in the informal economy were counted. The spike in interest rates late last year has aggravated the problem, but most of the unemployment is structural: Companies forced to compete in Brazil's opening economy are firing thousands of employees. Jo lessness is hurting President F nando Henrique Cardoso in th polls, though he is still expecte to win reelection in October.

Cardoso also must manage a increasingly delicate debt situa tion. About one quarter of Bra $265 billion in domestic debt e pires in the next three months The government has accelerat the rate at which it issues dol linked paper to roll over matu debt. But that tactic has raise some eyebrows among econom since the move exposes Brazil outstanding debt to potential changes in the currency and overnight interest rates. That makes investor confidence cru To keep it, Brazil will have to keep currency reserves—as w as interest rates—high.

By Ian Katz in São P

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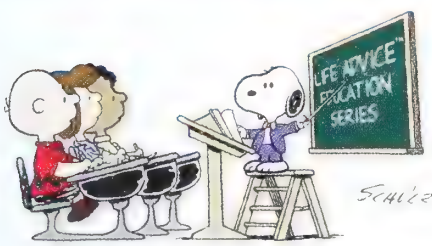

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THE INTERNET

CLICK HERE FOR WACKY VALUATIONS

The latest buying frenzy overinflates most Net stocks' potential

Just when you thought Wall Street's worship of the Web couldn't get any wackier, Internet stocks take off again—on another gravity-defying streak. Look at Yahoo! Inc. In early June, its shares sold for $104, 12 times its initial-offering price in 1996. From there, it streaked to a record of $199 on July 6 before settling down to $186 on the 8th—leaving it with a market cap somewhere north of $9 billion. This for a company that analysts say might earn 45¢ a share. That translates into a price-earnings multiple of 413.

Still, Yahoo! is practically a blue chip compared with other Net issues: At least it has earnings. Many of the shares enjoying similar runups don't even have much in the way of revenue.

So, why the latest outbreak of Web mania? One factor, say analysts, is that small investors are piling into Internet-related stocks almost indiscriminately in an attempt to catch the next big wave. In the process, they are sending small-cap issues into uncharted regions at mind-boggling velocities. Take Inktomi, a provider of search-engine technology for companies that include Microsoft Corp. Its shares traded publicly for the first time on June 10 at 18. Now, it's trading at 73½. All sorts of Internet-related stocks have been on a similar course, driving the Hambrecht & Quist Internet Index from 141 on June 1 to a record 208 on July 6.

The new prices have even enthusiastic analysts scratching their heads, trying to come up with valuation methods to explain them (page 34). "If there is a valuation model, it's so obscure that it defies me," says Andrea Williams, an analyst at Volpe Brown Whelan & Co.

But there's something more than investor frenzy at play. While current valuations will almost certainly prove unsustainable—some of the surge is driven by speculation about takeover deals that may never come off—beneath all the froth is the recognition that, at for some well-positioned companie Web is about to start delivering p

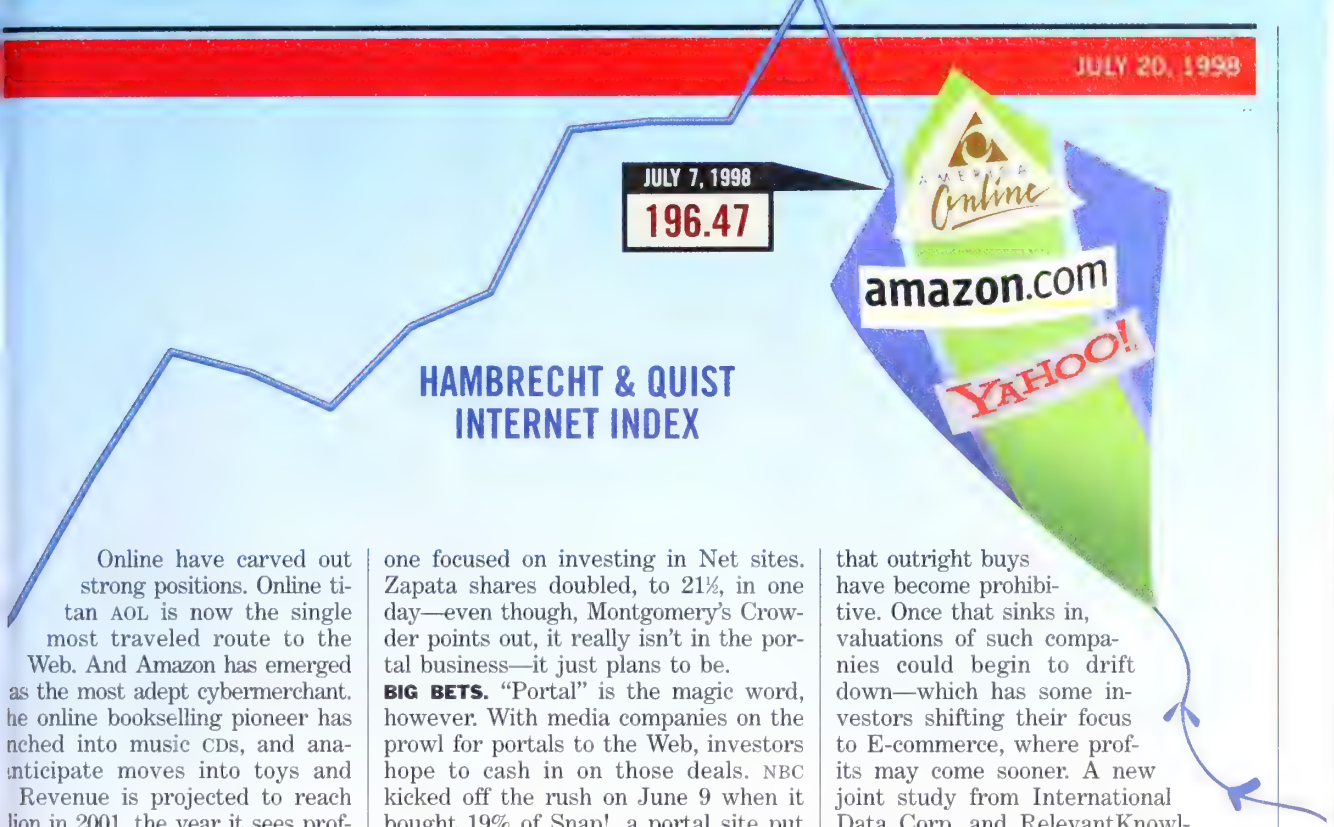
By 2002, there will be 62 m households online, and consumer E merce will hit $22.6 billion a yea cording to Forrester Research I That means the Web will finall emerge as a mass medium for information, entertainment, and E-commerce. And companies that now operate popular "porta" that have proven their ability to s line are set to start reaping the re

SOLID SUBSET. Yahoo!'s recent i for instance, was inspired by a predictions that the company woul projected 9¢ per share earnings (charges) in the June quarter. On Yahoo! reported pro forma res 15¢ per share. "A subset of th many Internet companies are rea panies building real businesses, David V. Crowder, a managing d at NationsBanc Montgomery Sec "Yahoo! has grown faster and profitable much more quickly tha ple thought it would."

Indeed, Yahoo! has evolved in Net's top portal, drawing more t million users a month. It keeps coming with free E-mail and othe ies—and advertisers who want t them follow. Yahoo! also gets merce revenue. The result: A predict earnings per share to j 75¢ on revenue of $229 million i

Who else will be able to deliver as well as promises on the Net? tion to Yahoo!, Amazon.com and

Prices for portals are so high that tak



Online have carved out strong positions. Online titan AOL is now the single most traveled route to the Web. And Amazon has emerged as the most adept cybermerchant. he online bookselling pioneer has nched into music CDs, and ana- nticipate moves into toys and Revenue is projected to reach lion in 2001, the year it sees prof- h earnings of 86¢ a share, pre- amie Kiggen, an analyst at Don- Lufkin & Jenrette Inc. BancAmerica Robertson Stephens Keith Benjamin says that even) companies are overvalued by erous yardstick—selling for more) times his estimate of their earn- r share in 2001. Amazon's stock ost tripled since June, to 114⅛ on before falling back to 107 on July gives Amazon a market cap of lion. That compares with Barnes e Inc.'s market cap of $2.9 billion nues of $2.8 billion last year. those values hold? Not likely. w, any company that can identi- f with the Web has a winning from Audio Book Club to Zapata n July 6, fish processor and food- e-material maker Zapata said it split into two companies, with one focused on investing in Net sites. Zapata shares doubled, to 21½, in one day—even though, Montgomery's Crowder points out, it really isn't in the portal business—it just plans to be.

BIG BETS. "Portal" is the magic word, however. With media companies on the prowl for portals to the Web, investors hope to cash in on those deals. NBC kicked off the rush on June 9 when it bought 19% of Snap!, a portal site put together by Internet news publisher CNET Inc. The next media company to bite was Walt Disney Co. On June 18, for $70 million and its controlling stake in Web site publisher Starwave Corp., Disney acquired 43% of Infoseek.

Now, investors are placing bets on who will be next. Netscape Communications Corp. shares leaped 53% on July 1-2 after an exec told a TV interviewer that the company was talking to media companies about publishing content on its Netcenter, giving it more portal potential. And shares of Lycos Inc., the No. 4 search engine, have risen as the company negotiates with major media companies, including CBS and Time Warner Inc. But nothing is imminent, say sources close to the company.

But many analysts warn that the deal angle may be a sucker bet. Prices have already risen so high for portal plays that outright buys have become prohibitive. Once that sinks in, valuations of such companies could begin to drift down—which has some investors shifting their focus to E-commerce, where profits may come sooner. A new joint study from International Data Corp. and RelevantKnowledge Inc. says that by 2002, half of the 102 million people in the U. S. who use the Net at home will be shoppers.

So investors are turning to cheaper E-commerce stocks. Those include music retailers CDnow Inc. and N2K, both valued at less than two times 1999 revenues, vs. almost nine times for Amazon, says Volpe's Williams. E*Trade has also been left behind because of concerns over rising competition in online brokerage. But Anurag Pandit, portfolio manager for the $600 million John Hancock Emerging Growth Fund, says E*Trade is a category leader: "They're redefining the process of investing."

For now, however, you can forget

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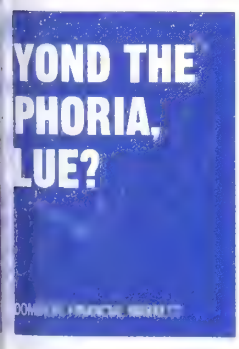
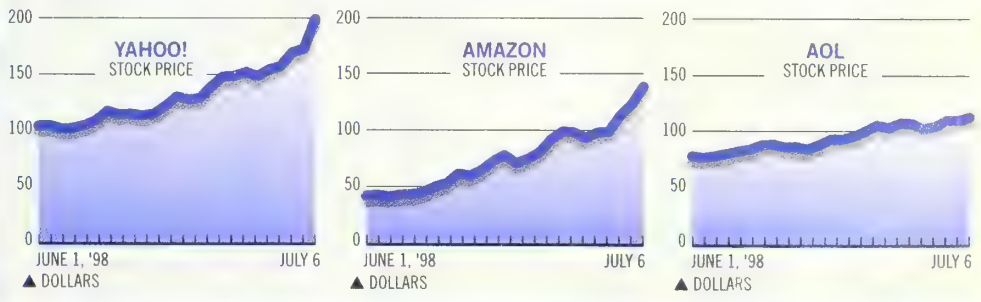




may not happen. The next play: E-commerce

fundamentals. What is lofting Internet stocks—and could quickly bring them back to earth—are forces within the equity markets. Most basic are the laws of supply and demand. Investors continue to chase a scarce supply of shares. Excite, for instance, has 7 million publicly-traded shares. That makes for a lot more volatility than, say, Disney, which has 671 million. The small float exaggerates short squeezes, too—when short sellers scramble to cover their positions and push prices up. In June, short interest in Amazon hit 8 million shares—out of about 16 million.

Another huge force: institutional investors. Ominously, some have been selling Internet shares recently. "The group has gone to valuations that aren't sustainable," says Michael P. DiCarlo, a partner at DFS Advisors, which holds AOL, CDnow, and E*Trade, after taking profits in Lycos and Info

How far could Internet stocks Some analysts are bracing for a 20 30% correction after second-qu earnings announcements. That cou duce the flip side of this stock-b mania—Web depression.

By Heather Green in New York Amy Cortese in New York, Paul in Boston, and Robert D. Hof in Mateo

COMMENTARY

By Jeffrey M. Laderman

NET STOCKS: IT'S A MAD, MAD, MAD, MAD MARKET

Finance 101 tells us that stocks are almost always rationally priced—the theory that all information about companies and their prospects is incorporated into prices. But some investors looking at sizzling Internet stocks such as Yahoo!, Excite, and Amazon.com come to one of two conclusions:

> Emerging technology industries can turn on a byte, leaving today's sparkling business plan looking like yesterday's lunch

Either the market in its collective wisdom knows something about these companies that escapes the average investor, or the theory is just bunk.

Certainly, most of the tools investors use to value equities don't work here. Price-earnings ratios? Many don't have earnings. Price-to-book value? Book value is a meaningless number in a business where fixed assets are scant and accounting convention doesn't value cyber real estate. Cash-flow models work well on mature companies with low capital expenditure needs, but usually don't on fast-growing tech companies.

OVERPAYING. Some folks might feel more comfortable paying for a company, such as Yahoo!, that is currently profitable—rather than for one that isn't, such as Excite. But that may be a false sense of security. Look at Yahoo! Wall Street analysts are forecasting profits of 45¢ a share this year and a five-year compounded annual growth rate of 57%, according to Zacks Investors Research. If the seers are right, that 57% growth rate puts Yahoo profits at $4.29 a share in 2003. At the current price of 186, the stock is trading at 43 times projected earnings five years from now. That's nearly double the p-e ratio for the Standard & Poor's 500-stock index, based on the next 12 months' earnings.

Are investors overpaying earnings of the Internet companies? It sure seems so. That's why small company investors such as James L. Callinan of Robertson Stephens Emerging Growth Fund prefers using the price-to-sales ratio. On that count, Callinan says Yahoo! sells at 80 times what the last quarter's sales figure would be if annualized. Excite, which is not expected to turn profitable until late next year, comes in at a relatively modest 12 times sales. Callinan notes that Yahoo!'s forecast revenue growth rate is 200%, compared with only 100% at Excite. But is the faster rate worth more than six times as much?

Price-to-sales has its shortcomings, too. Excite might be a steal compared with Yahoo!, but who's to say 12 times sales isn't too high? Buying the cheapest company in an overvalued industry is no guarantee of getting a winn "Yahoo! gets a premium price because it's the ma ket leader by a long shot says Paul Cook, portfolio manager at Munder NetNet Fund. "Not all the search engine companies will survive."

Nor is there a guarantee tha Yahoo! will stay on top. Eme ing technology industries turn on a byte, leaving t day's sparkling business plan looking like yester day's lunch. Three years ago, Netscape Communica tions Corp. went public and sh to 84 times sales—higher than hoo!'s current valuation. Aficion dos bragged that it would eclip Microsoft Corp. As if. Once Microsoft set its sights on the new kid on the block, Net scape's hot hand turned to There's no doubt that, an industry, the Internet huge potential. But the tom line is how much i vestors will pay in tod real dollars for tomor row's yet-to-be-deter mined profits. Perha the market's extraor nary valuations on t Internet companies rational. But it will take years at least fore we know. The penalty for being wrong, especially for t buying at today's prices, be severe.

Senior Writer Laderman co Wall Street for BUSINESS WEEK.

NEW PROCEDURES
Outpatient and drug therapies are replacing hospital stays, curbing costs

.TH CARE

IERE'S THE DREADED SPIKE HEALTH COSTS?

ıium hikes stay small as employers call the shots

s was going to be the year the alth-care honeymoon ended. Em-oyers who had enjoyed three of blissful pricing moderation l for the reemergence of signifi- higher premiums from newly d insurers. Benefits consultants, Street analysts, and the media—ESS WEEK included—all predicted ealth maintenance organizations win increases of at least 4% and ch as 6% or more this year, and ntially higher gains in 1999.

v, evidence is mounting that the noon isn't quite over. Despite a outcry against stingy managed-ograms that has President Clinton her politicians racing to add costly tes, the cost of providing health not leaping. A recent of 1,583 employers IG Peat Marwick finds e health premiums up 3% this year. Benefits tant Towers Perrin's te is about the same. n a June BUSINESS Harris Poll, senior ex-es said their compa-health costs would ust 3.5% in the next 12 months—barely changed from the forecast last year.

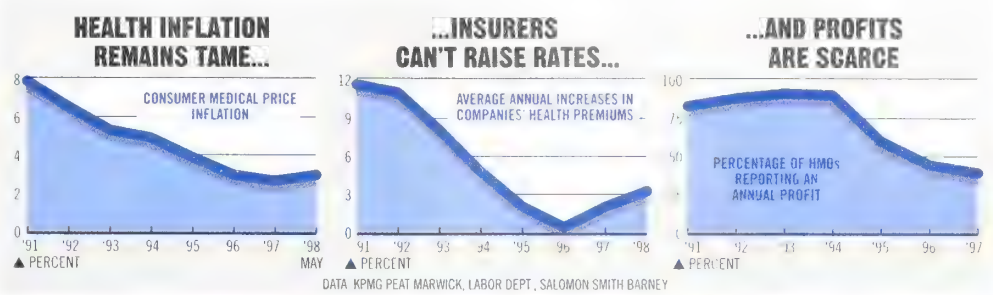
In many places, it turns out, employers still call the shots as insurers struggle to grab market share in what is becoming a commodity business. Gillette Co., for one, predicts its HMOs nationwide will propose price increases of 3% to 6% for next year—but it expects to settle at between 1% and 3%. How? It "will let [HMOs] know what [the competition] is charging, then let them decide if they want to lower the rate," says Deborah Winer, manager of welfare plan administration.

Similarly, Greyhound Lines Inc.'s health-care costs will increase by 3% this year, and about the same in 1999—"lower than we thought," says Benefits Director Roy Shaver. Meanwhile, the Group Insurance Commission, which represents 300,000 state employees in Massachusetts, secured premium increases averaging 3.6% for contracts effective on July 1—higher than last year, but still modest.

That bodes ill for HMO earnings. The difference between the old 5% forecasts for 1998, which public HMOs and Wall Street still cling to, and the more recent data represent some $6 billion in premium revenue, perhaps a third of total managed-care industry profits. Given that most HMOs haven't had much success lately in cutting payments to doctors and hospitals, their profit growth depends almost entirely on hiking prices.

"WISHFUL THINKING." HMO stocks—notably United Healthcare Corp. and Wellpoint Health Networks Inc.—have risen this year, largely on the promise of stronger pricing. That could be hard to live up to. The "predictions of faster [premium] increases were predicated on wishful thinking on Wall Street," says Howard R. Veit, managing principal at Towers Perrin's health practice.

To be sure, medical prices ultimately will head higher: Aging baby boomers will lift demand for health services over the next several decades. Drug spending is soaring, up 15.4% in the first quarter from a year earlier, a function of more expensive new products and volume growth, according to researcher IMS Health Inc. And there are political pressures: The federal Patient Access to Responsible Care Act and state efforts to raise care levels could push up costs



by several percentage points if enacted.

The question is, who will pick up the tab? Employers are bound to accept some inflation, since switching carriers generally brings extra costs and employee discontent, says John C. Erb, a vice-president at Gallagher Benefit Services in Boca Raton, Fla. Yet health plans, despite the ongoing consolidation, still haven't achieved the market power needed to dictate negotiations.

That's why many experts now believe that the rise in rates will be more gradual, and shallower, than previously thought. KPMG Managing Partner Richard D'Amaro estimates the increase for 1999 at 5% or 6%, down from the 8% to 10% commonly forecast six months ago. Aetna Inc., which says it won HMO price hikes of "5%-plus" in this year's first quarter, expects a gradual acceleration to around 7% next year.

MEDICARE SHIFTS. Besides HMOs' inherent weakness, several factors will help curb premium growth. Underlying medical cost inflation, as measured by the consumer price index, is startlingly low. At 3% in May, it's up from its recent low of 2.5% last October but remains well below its highs in the early 1990s. Even that figure likely overstates true inflation, the Labor Dept. concedes, since it fails to capture quality improvements as well as the shift in medicine from hospital stays to less expensive outpatient treatment and drug therapies.

At the same time, new Medicare reimbursement rules are unlikely to shift costs abruptly onto commercial payers, as analysts once feared. While Medicare's reimbursement to HMOs will gradually ebb in some markets, it generally will be generous enough to allow high profits. And new Medicare rules for inpatient stays will have little effect on hospitals' profitability, says Stuart Guterman, deputy director of the Medicare Payment Advisory Commission, since they simply scale back increases that were unlikely to be enacted anyway. So costs to HMOs are unlikely to rise as well.

Insurers are left with a conundrum. To justify higher premiums over the long haul, they must demonstrate that managed care can provide better service. But to build up service, they need higher premiums. And for now, they appear mired in the incessant price wars that have throttled earnings since 1995. Employers are winning, while HMOs face what could be another long, unprofitable summer.

By Keith H. Hammonds in New York, with Geoff Smith and William Symonds in Boston, Wendy Zellner in Dallas, and bureau reports

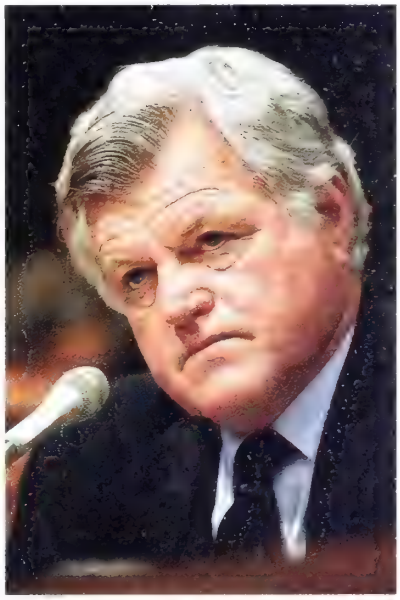
WASHINGTON

SOCIAL SECURITY: AND NOW FOR THE LIBERAL FIX

A Democratic plan would have the government invest in sto

For months, Capitol Hill liberals watched in silent horror, convinced the crown jewel of the New Deal was at risk. Congressional Republicans—and even some influential Democrats, such as Senator Daniel P. Moynihan (D-N.Y.)—argue that Social Security can best be shored up by letting workers invest part of their payroll taxes directly in the stock market. As polls showed the public warming to the idea, liberals were still on the sidelines.

But not for much longer. Hill Democrats will soon roll out plans that would let Social Security tap into the stock market's healthy returns without putting individuals at risk in bear markets. Senator Edward M. Kennedy (D-Mass.) is considering legislation to let the government invest up to half of Social Security's surpluses in the market. A similar measure that Representative Earl Pomeroy (D-N.D.) will soon unveil could become the official plan of the House Democrats.



KENNEDY: Backers of his plan figure higher returns would close half the system's long-term deficit, while shielding individuals from market risks

Backers figure that switching the trust fund—now invested just in Treasury securities—to a blend of stocks and bonds could close nearly half of Social Security's projected long-term deficit. The plan would protect individuals from market risks—and head off a wholesale replacement of Social Security with a system of private investment. "We're trying to slow down the runaway privatization freight train," says Representative Jerrold Nadler (D-N.Y.).

But business isn't eager to see Uncle Sam take a direct stake in Corporate America—up to $2 trillion by 2020. "You could be socializing the private sector," frets Martin A. Regalia, chief econ of the U.S. Chamber of Commerc

Liberals think they can defuse concern by following a model laid o Brookings Institution economist H Aaron. His plan would establish a Social Security Reserve Board to the surplus toward a dozen or large money-management or mu fund firms. The managers would dered to build portfolios that track stock indices as the S&P 500. As sion-fund managers, they'd be rec to vote the shares they buy only best interests of Social Security's ficiaries. Aaron says his schem "triple-insulate avoid politicall ven investment

The plan give a big bo the mutual-fu dustry, but n much as the ou privatization fa by many Re cans. While Security migh its money mar up to $7 bill year, that 0.35 is about one-t what fund com would be ab charge individu

DOWNER? Th another issue: investment ma offer the payof sors expect. F Reserve Cha Alan Greensp warned that re ing the trust f likely to drive share prices boost bond ret and the results could be a wash.

But the left's resurrection is w news to those Clinton Adminis officials who, like Treasury Sec Robert E. Rubin, are skeptical private accounts. What looked romp toward privatization may t to be a debate after all.

By Mike McNamee in Wash

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BANKING

A YELLOW WARNING FOR BANKS

This crazy lending can't last, the Fed says

A year ago, bankers were whooping it up. Competitive and confident, lenders were taking increasing risks, whether it came to pricing loans or setting terms. Indeed, the only thing bankers seemed to fear was missing the chance to join in on the fun—as the corporate loan-syndication market broke $1 trillion.

Now, the mood is shifting. While no one is suggesting that the good times are gone, there is distinctly less exuberance. In Washington, regulators are growing more critical of bank lending standards. The latest caution flag was waved by the Federal Reserve, which on June 30 issued a public warning about a deterioration in commercial-loan underwriting and a possibly troublesome concentration of lending to real estate investment trusts.

And it won't end there. Julie L. Williams, acting Comptroller of the Currency, told BUSINESS WEEK that she will unveil "new initiatives" on July 13 in Chicago to improve commercial and consumer lending standards. "It is time to ratchet up" oversight, Williams says.

"A FIRMER TONE." Will the warnings do the trick? Loan-pricing data suggest that bankers already may be pulling back from the race to arrange loans at any price, a strategy employed in hopes of selling borrowers other products. Loan spreads—the premium that corporate customers pay relative to the most popular interbank lending rate, LIBOR—are rising after years of declines. Loss-leader strategies are also losing favor. "Smart banks are looking at returns on all of their assets, including loans," says Caroline Shapiro, a vice-president in the loan syndication group at J. P. Morgan & Co.

In addition, a key group of lenders is missing in action. Japanese banks have retreated from loan syndications as they contend with problems at home, easing competition for business. "Their backing away has tended to put a firmer tone under the entire market," says Robert S. Strong, chief credit officer at Chase Manhattan Corp.

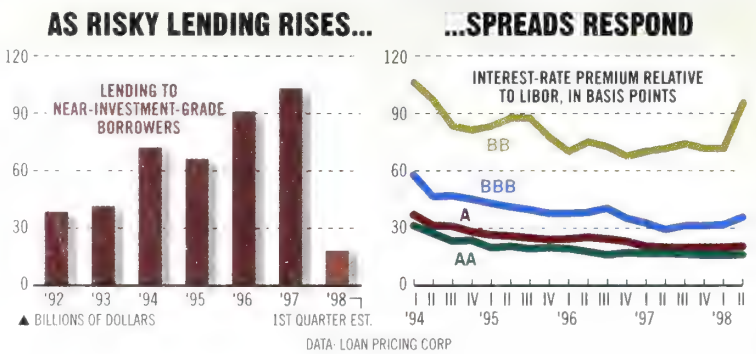
In the second quarter alone, spreads on loans to companies with near-investment-grade credit ratings widened 24 basis points to 95.5, their highest levels in four years, according to Loan Pricing Corp., a New York firm that tracks syndications. Up-front fees are also being attached to loans more often. "We have seen clear evidence that a reversal—that is, not only a bottoming out, but a firming of pricing—has taken place," says Arthur P. Davis III, Loan Pricing Corp.'s president. "Until recently, the pricing was particularly worrisome. There was basically no money to be made in lending to certain categories of borrowers."

Still, the banks have a ways to go before they reverse the excesses of the past several years. Between 1992 and 1997, the fees banks charge top quality corporate borrowers for some types of backup credit fell 70%, to roughly 6 basis points. "There is not enough juice in that fee to pay the banker and the analysts and everyone else involved," Davis says. Even this year, utility holdings company Edison International of Mead, Calif., renewed a deal t about 4 basis points for backup li credit totaling roughly $3 billion.

The Fed's fear is that even i pull back now, banks have left selves vulnerable. After comparing mercial and industrial loans ma late 1995 and late 1997, the Fe cluded that banks were dr prices—as well as the terms that help them recover collateral. same time, the Fed worried t lending so much to REITs, banks be hit if a real estate downturn the ability of REITs to tap publi kets to repay bank borrowings.

In all, the Fed found a surp lack of concern the future. Alt banks were len longer maturitie 20% to 30% of l proval documen the Fed review cluded a formal tion of a borrow ture performanc

The banks, of have heard it fore—even as piled up record The Fed and th



Comptroller of the Currency have
:d about underwriting since 1995.
ıe regulatory heat is growing. In
ıary, Eugene A. Ludwig, then
:roller of the Currency, sounded an
about "too much money in the
ıg system chasing too few deals."
'ederal Deposit Insurance Corp.
said more banks were loosening
g standards than tightening them.
eed, Williams says that for every
sing development on the credit front, there seems to be a new worry. For example, banks seem to be tightening standards for credit cards. But lenders are loosening them for home-equity loans, which are often used to consolidate credit-card debt—enabling consumers to charge away. So while consumer debt levels rose only slightly in May, the volume of bank home-equity loans outstanding rose 9% over the previous year, to $98 billion. "There may be some indicators that are promising," says Williams. "But it's really too soon to draw any conclusions."

It also may be too late to do much about easy underwriting should the economy falter. "Anytime the regulators can document something, the bankers are well into the process," says Charles Peabody, banking analyst at Mitchell Securities Inc. "If we happen to have a downturn tomorrow, it's too late."

By Gary Silverman in New York

COMMENTARY

By Dean Foust

NAG, NAG, NAG. WHAT ELSE CAN BOB RUBIN DO?

What's a Treasury Secretary to do? Robert E. Rubin has all but begged Japan to clean up troubled banking system and nulate its economy with tax cuts. st recently, he warned on July 7 t Japanese officials must enact ong and sustained fiscal nulus" to "get out of the ass that they've been In June, against his ini- instincts, he even ed engineer a massive chase of yen to halt its e.

Most likely, Japan will tinue to resist U.S. ssure to take the politi- y painful steps needed to se its economy back to lth. But Rubin can't sim- walk away: The risks of ıg nothing are too grave the global economy. Ru- has to look for every ortunity to keep the t on.

ARY." But Rubin has a mma. When he dealt ı currency crises in ico and in Asia's tiger ıomies, he could extract ıomic reforms in return U.S. and International ıetary Fund assistance. Despite enormous risk a shaky Japan es to the global economy, though, U.S. Treasury is largely power- with Tokyo. A weak Japan still more of a hold on the U.S. econ- than the surging American ıomy has on Japan. Japanese in- ors fund the U.S. current-ac- ıt deficit with their holdings of e $300 billion in Treasury securi- "The influence the rest of the ld has over Japan is fairly limit- admits Marcus Noland, a scholar at the Institute for International Economics. "This is bothersome and scary."

Perhaps nothing illustrates this point better than the events of the last few weeks. By giving in to Japanese pressure to join in the yen rescue mission on June 17, Rubin bought enough goodwill to press Tokyo to go ahead with a plan to close insolvent banks. The Japanese, with great fanfare, pledged to create a new "bridge bank" that would take over smaller institutions. But Japanese officials are committing only a sliver of the $530 billion or more needed for the cleanup. What's more, they have all but signaled that the 19 largest, most powerful banks are protected. That has helped drive the yen back close to its level when Rubin intervened to prop it up.

RUBIN: *Should he have let the yen continue its slide?*

What else can be done? Massachusetts Institute of Technology economist Paul R. Krugman says Rubin needs to press the Japanese to take bolder steps, such as calling on Japan's central bank to use an inflationary monetary policy to get Japan's economy going. But U.S. Treasury officials fear that approach might trigger a new run on the yen. On the other hand, trade hawks such as Clyde V. Prestowitz Jr., president of the Economic Strategy Institute, want the World Trade Organization to threaten trade sanctions so the Japanese don't try to export their way out of trouble. That would get Tokyo's attention—and help prevent further devaluations by other Asian nations—but it would risk a global trade war.

The U.S. shouldn't be surprised that Japan resists its calls for reform. A decade ago, the two countries' roles were reversed: A powerful Japan kept nagging the U.S. to cut its budget and trade deficits to stop the dollar from sinking—to no avail. Indeed, it took years for the U.S. to muster the political will to tackle its problems.

By the same token, Japan wouldn't have undertaken even modest reforms now without unrelenting prodding from the U.S. In the end, Rubin's persistent nagging may get Japan to do the right thing.

Foust covers international economics from Washington.

HEAVY LOAD? *Overnite may have to assume deep debt*

LABOR

ROAD HAZARD FOR AN IPO

The Teamsters may clobber a Union Pacific spin-off

Union Pacific Corp. had a simple plan. Having lost $214 million in the six months ended in March because of problems stemming from its 1996 merger with Southern Pacific Rail Corp., the No. 1 railroad needed cash. So UP decided to spin off Overnite Transportation Corp., its largest nonrail asset. On May 20, Union Pacific filed a prospectus with the Securities & Exchange Commission for an initial public offering that says it hopes to sell the nation's No. 6 trucker for $550 million.

But there's a roadblock: the Teamsters. Over the past four years, the union has recruited 43% of Overnite's 8,400 drivers. Still, the company—which disputes the validity of some of the elections—is refusing to sign the Teamsters' National Master Freight Agreement, the pact covering major unionized trucking companies.

With the IPO pending, the Teamsters seized the opportunity to get management's attention. Members launched a series of disruptive strikes on June 22, citing local issues such as overtime. But the real aim is to get a national contract and ensure that Overnite isn't spun off with crippling debt. On July 8, the Teamsters authorized a yet-to-be-scheduled nationwide walkout and an informational campaign on the IPO for Wall Street.

Union leaders have not been the only ones to express alarm over the prospect of a company in hock. Back when Union Pacific was drawing up the proposal for the IPO, the railroad's executives ran into opposition from the management of the trucking unit over plans to saddle Overnite with as much as $150 million in debt, company insiders say. For now, the filing for the initial public offering has blanks where debt numbers will appear when the company starts its road show in mid-July. Both Union Pacific and Overnite declined to comment.

The Teamsters campaign puts Union Pacific and Overnite in a bind. If Overnite signs a contract, labor costs could jump 20%, and more workers would join the union. That could scare investors and pare the IPO price, insiders at Overnite say.

RIGHT PRICE? Yet the labor disruptions are having the same effect. Analysts say investors are skittish about buying a company in such turmoil. "It will be difficult for UP to get an IPO done without some resolution of the labor issues," says Thano Hasiotis, a trucking analyst at Salomon Smith Barney. Other experts say UP can't get $550 million and are already predicting it will be forced to reprice the IPO.

As for UP, it can't get Overnite off its books fast enough. Not that the unit is doing badly. Leo H. Suggs, Overnite's CEO since April, 1996, managed to bring it back into the black in 1997 after two years of heavy losses. However, he can't shake the Teamsters. The National Labor Relations Board has gone to court to force Overnite to the bargaining table in more than a dozen cities.

Teamsters officials say that they would consider giving Overnite a break on work rules or other items if the company signs the master freight pact. The union has done similar deals with other struggling truckers. So far, however, Overnite has shown no interest. That could change if drivers are still striking when UP starts to pitch its IPO. Either that, or UP may have to rethink its plans.

By Aaron Bernstein in Washington

EXECUTIVE SUITE

MAN OVERBOARD AT MANPOWER

The CEO's heir apparent is suddenly walking away

For months, executives and b members of Manpower Inc. planned a grand fete on July Paris for more than 100 French tomers at the plush Pierre Ca restaurant along the Seine. The will celebrate the sponsorship of World Cup by the world's largest porary help firm and highlight power's French presence.

But these soccer fans are likely to bit subdued. On July 6, Manpowe

SHAKEUP Losses i France, a critical market, widened a rift between Fromstein and his European chief

nounced the abrupt resignation chief European executive and c nancial officer, Jon F. Chait, amid a agement shakeup brought on in p an earnings shortfall in France, power's second-largest market mounting corporate expenses.

From numerous accounts, Cha was seen by insiders and invest heir apparent to Chairman and C ecutive Mitchell S. Fromstein, 70.

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utives who know Fromstein and Chait—who is not commenting—say Chait was increasingly keen to get on with it. But retirement isn't on Fromstein's agenda. What's more, Fromstein, a dominant figure in the industry for nearly two decades, seemed to have cooled to Chait, a lawyer who joined Manpower in 1989. "I wasn't willing to make a selection from one candidate at this time," says Fromstein. Now, the betting is on Jeffrey Joerres, 39, who will oversee Europe, excluding France, and all global accounts.

Differences between Fromstein and Chait appear to have boiled over as Fromstein planned to dismantle Manpower's European headquarters in Brussels that he had set up in 1995 and that Chait had run. Now, country managers will report directly to the Milwaukee headquarters. Chait wanted to oversee France, which could generate 40% of Manpower's revenue this year, say some insiders. But Fromstein says the sheer size of the market argues for his direct oversight. "We need to shorten the lines of communications and reporting."

AWKWARD TIME. Now, board members will be mulling how to get a grip on mounting costs and the margin squeeze in France, which some insiders say stem from a drive for market share. Directors also soon may deal more directly with the question of who will succeed Fromstein, who has been CEO since 1976, except for one month when he was ousted after a hostile 1987 takeover by Britain's Blue Arrow PLC. He was reinstated at the behest of angry franchisees.

Indeed, the shakeup comes at an awkward time. Manpower's stock is at about $28, down from a 52-week high of $50.38. A new computer system is late and may cost $25 million more than initially estimated. Morgan Stanley Dean Witter & Co. analyst Adam Waldo figures that Manpower sales will rise 18% this year, to $10.5 billion, but income will fall 12%, to $144 million. "It is vital to shareholders that credibility be restored," says Jane R. Davenport, a vice-president at Montag & Caldwell Inc., Manpower's largest shareholder.

Could Manpower be vulnerable to a raid? Some investors think it's not impossible. Waldo is not predicting a takeover, but Fromstein, who regained management control in 1988, dismisses the possibility. But the normally gregarious executive admits that recent months have been "humbling." He insists costs will be brought under control and that earnings will soon rebound. That could give Manpower reason to really celebrate—next year.

By Richard A. Melcher in Chicago

SPORTS BUSINESS

BATTLE FOR THE BROWNS

Corporate Cleveland goes to war over who'll own the team

Sports-crazed Clevelanders were heartbroken when the Browns were unceremoniously uprooted in 1996, moved, and reborn as the Baltimore Ravens. The city's corporate elite launched a campaign for a new stadium—which the National Football League had demanded before approving a new Browns franchise. Local companies snapped up 94 luxury boxes at $125,000 apiece, and the NFL gave the go-ahead: On Aug. 21, 1999, the new Cleveland Browns are scheduled for their first kickoff.

But who will own the team? As of July 8, there were five competing investor groups. The latest bid is from Cleveland Indians owner and shopping-mall mogul Richard E. Jacobs. The competition for the team, which will cost $300 million to $500 million, is pitting executive against executive.

Big out-of-town money has entered the picture, and some local loyalists—who would like to own the team themselves—are stewing. The group that rankles some Clevelanders most is headed by New York real estate entrepreneur Howard Milstein. That bid is being masterminded by Patrick F. McCartan, a managing director of Cleveland-based Jones, Day, Reavis & Pogue, a powerhouse law firm that counts Mils among its clients.

Rivals say the Milstein team is tr to stack the deck by collecting port—but relatively little money— Cleveland's corporate celebrities. includes Joseph T. Gorman, chair and CEO of TRW, who is also hea Cleveland Tomorrow, an influential group that was behind the city's re renaissance campaign.

"EMOTIONALLY COMMITTED." "Milst got deep pockets, but what does he k about the Cleveland Browns?" Thomas G. Murdough Jr., preside Step2 Co., a local manufacturer of h garden, and children's products, w heading a competing investor grou have lived here for 30 years. I've b fan. I am emotionally committed t

NEW DIGS: *Local companies snapped up 94 luxury boxes at $125,000 apie*

The other big out-of-town Charles F. Dolan, the head of C vision Systems Corp. in Woodbury Dolan, along with his brother Lave J. Dolan, a Chardon (Ohio) lawye organized a group of star investors as comedian Bill Cosby and footba end Don Shula.

The next play comes on Ju when NFL owners meet to revie bids. A final decision will be ma mid-September, and the winner w the franchise fee to the other owe

Whoever winds up with the B could make out handsomely i sports-hungry town. Witness J success with the Indians: On Jun completed the first initial public o of a ball club—raising $60 milli keeping control of the franch bought for $35 million back in 19

By Peter Galuszka in Cle

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ertise to solve them. We begin by establishing a relationship with customers based on open
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ien we look for creative ways to fill those needs – even if that means changing the way we do business.

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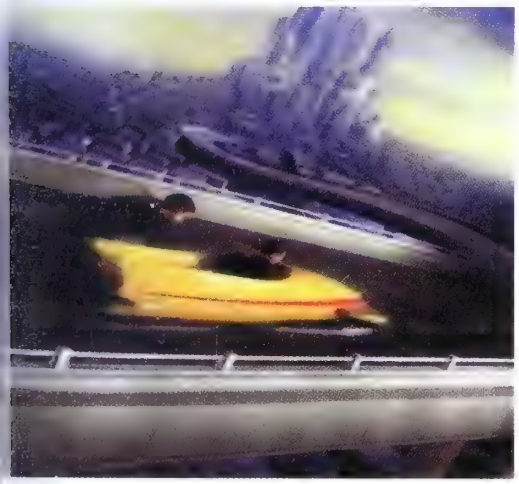

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EDITED BY KELLEY HOLLAND

SHAKING UP MOTOROLA

MOTOROLA JUST CAN'T SEEM to get back in gear—and investors are getting antsy. So after announcing quarterly operating earnings of just $6 million, or 1¢ a share, Chief Executive Christopher Galvin on July 9 unveiled a reorganization of his communications business. The group will have six divisions and target three customer segments. For example, the consumer unit, or Personal Communications Sector, will develop products from cellular phones to pagers. The Network Solutions Sector will provide equipment to telecoms. And a Global Telecom Solutions Group will keep Motorola's units in line with customer needs. But the move "is not going to solve all the problems," says Jeffrey Schlesinger, an analyst at UBS Securities. Wall Street will be looking for more solid results from the introduction of new Motorola digital products in mid-July.

DOW MAKES A DEAL ON IMPLANTS

MORE THAN THREE YEARS after filing for bankruptcy protection, Dow Corning and negotiators for the women with its silicone breast implants have reached a $3.2 billion settlement that would end the company's bankruptcy. The 16-year settlement trust will cover claims for medical conditions resulting from implant use or ruptures, as well as costs of removing implants. Details must be worked out over the next two months, then win bankruptcy court approval, before claimants vote on the plan. Women who don't agree to the deal can still sue.

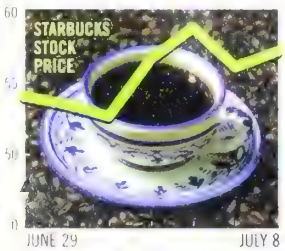
MICROSOFT GOES INTO VIRTUAL REALTY

WHERE DO YOU WANT TO GO today? House-hunting? Microsoft, which is already into online travel, automobile sales, and local entertainment listings, is getting into online real estate. On July 13, it plans to launch a home-buying service on the Web. The site, homeadvisor.com, will include real estate listings and maps, and will let consumers apply for mortgages. Other sites already provide real estate and mortgage services. But with the market for online mortgage sales expected to reach $25.6 billion by 2001, according to Forrester Research, there is plenty of room for a big-foot competitor.

CLOSING BELL

JUMPING BEANS

Starbucks stock was buzzing on July 3 as it leaped 4 to 56⅝; the next trading day, it hit 58⅛. The reasons: Starbucks may put coffee bars in or near Kinko's copy shops. And comparable-store sales rose 4% in June, even without raising prices. "Starbucks proved that even without price increases, they can do just fine," says Joe Norton, a Hambrecht & Quist analyst. Revenue should keep perking as Starbucks expands abroad and into grocery stores, analysts say.



DATA: BLOOMBERG FINANCIAL MARKETS

HEADLINER: TINA BROWN

TINA'S NEW LOOK: MOUSE EARS

Last October, during *The New Yorker*'s "Next" conference—a brainfest on the future held at the Disney Institute in Lake Buena Vista, Fla.—some moguls and pundits in attendance were surprised to see how chummy *New Yorker* editor Tina Brown was with Walt Disney CEO Michael Eisner. They wondered no more on July 8, when Brown and fellow Condé Nast executive Ronald Galotti left for the House of Mouse.

Brown, Galotti, and Disney's Miramax Films will be equity partners in a venture that will publish a magazine whose articles will become the basis for movies, TV shows, and books, says Miramax ch[airman] Harvey Weinstei[n]. Brown will be ch[airman] and Galot[ti] president of t[he] still-unname[d] business.

It's quite [a] departure fr[om] the prestigiou[s] but loss-making *New Yorker*. But Brown's move is only m[ild]ly surprising, given recent management turmoil. In a statement, she said the move was "no reflection on my wonderful experience at Condé Nast." Rather, she wanted "to expand our v[i]sion into other media"—a Disney vision for sure.

By Richard S[ch]

CHANCELLOR'S HUGE MEDIA MOVE

SO YOU WANT TO BE IN TV? ON July 7, Chancellor Media said it would pay some $903 million for LIN Television. Both Chancellor, the No. 2 radio company, and LIN are partly owned by Dallas investment firm Hicks Muse Tate & Furst. Chancellor plans to own radio, billboard, and TV properties in the same cities and sell package deals to advertisers. In June, Chancellor agreed to pay $610 million for billboard company Martin Media. TV "provides excellent opportunities for cross-promotion and cross-selling with our radio and outdoor assets," says Chancellor CEO Jeffrey Marcus.

A FRENCH HOWL OVER THE TOWER

SACREBLEU! THE THREAT OF the Eiffel Tower coming under U.S. control s[et]
cries of betrayal in the [Pa]
city council July 7. Th[e] B[ell]
brothers and a unit of [Ge]
al Motors' subsidiary [EM]
want to buy French[-]
Crédit Foncier, half-ow[ned]
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a 70% stake in the t[ow]
operating company. Ci[ty]
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tower from falling into [pri]
hands. To play it safe, [ma]
Jean Tiberi may up [the]
stake in the compan[y]
manages the tower to [a]

ET CETERA . . .

■ Treasury is launchi[ng]
savings bonds with in[-]
indexed returns.

■ William Gould IV re[-]
as chairman of the N[a]
Labor Relations Boa[rd]

■ Johnson & John[son]
putting new warning[s]
on Tylenol and Motrin

■ BellSouth is applyin[g]
to enter the long-d[is]
business in Louisiana

'ED BY OWEN ULLMANN

ANE HENNEY: THE RIGHT PRESCRIPTION OR THE FDA?

ey say Washington can't match the vicious political in-ghting of academe. If so, then heading the Food & Drug Administration—one of the hottest seats in gov-ent—should be a tea party for Dr. Jane E. Henney. 1994, the University of New Mexico tapped the ex-can-esearcher to oversee a merger of its hospitals and med-pharmacy, and nursing schools—all fiercely independent. ulled it off. "What made her so effective was that she re-loes listen," says medical school dean Paul B. Roth. ll come in handy as Henney, 51, tries to onfirmation from a GOP-controlled Senate ed that she may slow development of al devices and push for the abortion drug . If she survives the Senate gauntlet, the r FDA deputy commissioner will have to with such problems as tainted food and that prove harmful after approval.

doesn't help that Henney, nominated by n on June 23, wasn't the top choice of h & Human Services Secretary Donna alala, among others. Shalala had been ng acting FDA Commissioner Michael A. man, who has won high marks from his s at HHS as well as drug industry execs. e House pols, however, were eager to a woman. And Henney has a powerful r in Senator Edward M. Kennedy (D-). Henney's husband, Dr. Robert Graham, tive vice-president of the American Academy of Fami-ysicians, was once an aide to Kennedy. But Republicans rugmakers worry that Kennedy might exert undue in-e over the agency. One trade group, the Medical Device facturers Assn., already opposes Henney.

ere's no disagreement, though, that the FDA needs a ger capable of carrying out reforms mandated by Con-and launched by the controversial former FDA chief, A. Kessler. And management, Henney's backers say, is her greatest strength. Indeed, as Kessler's deputy in the early '90s, she reorganized much of the agency's operations.

The challenges facing the FDA are very different from the Kessler years of 1991-97, however. After restoring teeth and credibility to a defanged and scandal-scarred agency, he came under pressure from the GOP Congress to approve drugs and devices faster and to work more cooperatively with industry. Now, the FDA is okaying new drugs in record time.

But the agency's responsibilities are expanding faster than Congress' willingness to fund them. As a result, FDA officials confess they're doing a lousy job in such areas as making sure imported food is safe. With food imports up sharply—along with incidents of contamination—the problem is a high priority. In early July, Clinton reiterated his call for a $100 million food safety initiative that would include $25 million to expand the FDA's international inspection force.

HENNEY: *Keeping cool*

HASTY APPROVAL? FDA insiders also worry that their surveillance of approved drugs isn't up to the task. Case in point: The agency is bracing for more criticism if new wonder drugs such as Viagra continue to be linked to a string of health problems and deaths.

Henney will face a tough grilling in the weeks ahead as Senate and industry critics try to force her to take firm stands on key issues. For instance, how would she balance the conflicting pressures to approve products quickly while also assuring safety? So far, Henney has been mum. "We need to know what her philosophy is," says Alan H. Magazine, president of the Health Industry Manufacturers Assn., which has withheld an endorsement.

But Henney's boosters aren't fretting. They predict that the same quiet manner that disarmed the academicians of New Mexico will soothe the politicos of Washington.

By John Carey

CAPITAL WRAPUP

GOP'S CHINA ENVY

nate Republicans are trying to the afterglow from President ton's highly praised trip to China. ority Leader Trent Lott (R-Miss.), sing Clinton of undermining Tai-'s autonomy, is urging Congress affirm U. S. support for the d. Three Senate committees are ing into Chinese launches of U. S. llites. And the Senate will consid-ills to impose sanctions on Bei-such as U. S. opposition to World loans to China.

DIVIDED WE STAND?

▶ Republicans are growing confident that they'll keep control of Congress this fall. Their rosy outlook is based on signs of growing support among independents. Example: A June 24-28 survey by the GOP polling firm Market Strategies shows swing voters favoring Republicans 40% to 30%. This bloc gives high marks to President Clinton and a low grade to GOP congressional leaders. So why keep Hill Republicans in power? Independents want to continue divided government.

SKY COPS GET SHOT DOWN

▶ The Federal Aviation Administration as traffic cop of the sky? Not likely. After a deluge of complaints from pilots of private planes, the FAA has backed off a proposal to ticket errant flyboys. The FAA says on-the-spot write-ups of minor violations would cut the time it takes to resolve safety infractions, which now involve drawn-out bureaucratic procedures. But small-craft pilots claim the new system would give the agency too much power.

BANKING

THE BIG CLEANUP BEGINS

But will the bank workouts work?

It's a salvage operation extending from Jakarta's Jalan Sudriman financial strip to the concrete canyons of Tokyo's Ohtemachi banking quarter. The goal: to move almost $1 trillion in bad loans off the books of the regions' banks and create a smaller and sounder bank sector that can start lending again. The cost: easily in the hundreds of billions of dollars. The chance of success: probably not better than 50-50 given the enormity of the problem, the weakening state of Asia's economies, and the likelihood of political backlash. The cost of failure: huge, since the banking crisis is starving Asia of essential credit.

Policymakers should have tackled the bank mess months or even years ago. Yet financial technocrats are finally starting to talk a serious game across the region—in Japan, South Korea, Thailand, Indonesia, and Malaysia. While the details may vary, all five have or will set up rough versions of the U.S. Resolution Trust Corp. that played a critical role in ending the savings and loan crisis of the 1980's. The RTC conducted audits, shut down thrifts, and sold off their loans and underlying collateral as repackaged securities or via public auctions, usually at discounts to their face value. None of the Asian workouts will probably match the RTC in ruthlessness. But if they can tackle the worst problems, it will be a giant step forward.

Most important, of course, is the "Total Plan" announced by Japan to fix the country's banks. The plan would shake up failed institutions, remove managers, and even close some banks' doors. And in Seoul, where authorities shut down five smaller lenders on June 29, the government will impose mergers on the major commercial banks if need be. Out of 19 major banks, "I think three to five leading banks will emerge through various deals," figures Lee Young Keun, a member of the Financial Supervisory Commission that reports to South Korean President Kim Dae Jung.

FAVORED DEADBEATS. Accountability and shotgun mergers? You wouldn't have heard such talk a year ago. Now, Japan, Korea, and the Tigers of Southeast Asia are under intense pressure by the markets to clean up the mess left by reckless lending to overextended real estate developers, coddled state-run enterprises, and politically favored corporate deadbeats. If they don't clean up the banks, fresh capital may not flow into the region for years to come.

The Japanese plan gives a good idea of what these workout vehicles are like. A new Financial Supervisory Agency, staffed mostly by former MOF officials, will conduct audits of banks' books and have the power to close problem banks and appoint financial receivers. At banks earmarked for shutdown, regulators will transfer deposits and loans to one of several new "bridge banks" funded by state-owned Heisei Financial Rehabilitation Corp. The bridge banks will keep credit flowing to sound borrowers but

cut off unsound customers and t
them into bankruptcy. The bridge
will look for merger partners for
five years before shutting down
bank operations for good.

That's the theory. The rub is t
any real cleanup would have to
new loans to the overextended
struction and real estate companie
bankroll Prime Minister Ryutaro
moto's ruling Liberal Democratic
So politics may enter into the d
on which banks get a lifeline. A
plan will also throw thousands o
employees out into the streets. IN
ings Ltd. analyst James Fiorillo
seven major banks—including N
Credit Bank, Yasuda Trust & Ba

cial Supervisory Agency will conduct audits and shut down problem banks. Bridge banks will assume extend loans to sound borrowers, and cut off unsound borrowers. Problem loans: $550 billion.

osed five lenders and transferred assets to the Korea Asset Management Corp. Another seven are under rernment has also ordered banks to cut off 55 corporate borrowers. Problem loans: $90 billion.

75% of insolvent Thai finance companies. The Financial Sector Restructuring Authority is auction-s, while an Asset Management Corp. will take on really troubled loans. Problem loans: $36 billion.

ave shut down some 23 insolvent lenders, but Indonesia has almost 200 more in dire straits. An Asset t Corp. is assessing which bank assets to sell off. Problem loans: impossible to estimate.

Management Corp. will dispose of bad loans and shut down bad banks. Problem loans: $25 billion.

aiwa Bank—could be candidates ch restructuring. The burning n is whether the government has ll to flush out the bad debts and e trigger on chronically ill banks. stance is already forming else-in the region. In Seoul, after au-es shut down the five smaller and transferred $9.6 billion in n loans to the Korea Asset Man-et Corp., laid-off bank employees d. They sabotaged computer sys-and cut off power supplies to es to disrupt the transfer. The ment held firm—but there's no how fierce resistance will be at t round of closings involving big-nks. Yet the advantages of hon-estly executed workouts are huge. In Japan, shutting down some of the big banks could begin to restore confidence. More momentum will come if Hashimoto can overhaul Japan's archaic bankruptcy laws in an upcoming session of parliament. That would make it easier for banks to mark down and sell off their loan portfolios and real estate to international investors.

Such sell-offs will be crucial. Although the common assumption is that the banks can only sell their problem loans for a third of their face value, that may be too low. In Thailand, ground zero of the regional crisis, public auctions of autos and auto loans have fetched 50% to 60% of their book value, thanks to bids by companies like GE Capital Services Inc., which has snapped up $500 million worth. Most thought these assets would fetch only 40% of book value. Some property-backed loans, to be sold off later this month, may recoup half their value, too, reckons Salomon Smith Barney Vice-President James Mitchell. "The foreigners are ready to buy."

Of course, some loans are so deep underwater they won't fetch any bids at all and will have to be written off. Writing off the wretched stuff will require a lot of public money. Korea Asset Management has already burned through half of its $18.5 billion in capital to cover write-offs at the five banks it closed. Yet those banks make up a paltry 7% of combined assets of Seoul's big commercial banks, so the workout fund will obviously need fresh capital to complete its task.

Nor are all the workout plans as tough as they could be. Malaysia will launch a gentler version of the RTC to take on problem loans, work out repayment plans with debts, and broker mergers. Yet it has also slashed reserve requirements to prevent outright failures. In China, home to $200 billion in dud loans, a workout vehicle isn't even on the table. Instead, Beijing is shutting down poorly managed local bank branches, nudging loan-classification standards closer to international levels, and training bankers to assess risk.

Yet as the Asian crisis grinds on, global investors can easily avoid the countries that keep propping up their sickest banks. Sloppy lending triggered the meltdown. Fixing the banks, credibly and quickly, is the best way out.

By Brian Bremner in Tokyo, with Moon Ihlwan in Seoul, Bruce Einhorn in Hong Kong, and Michael Shari in Jakarta

COMMENTARY

By Jonathan Moore

TAIWAN'S BEST DEFENSE AGAINST BEIJING

These are gloomy days for Taiwan. Just a few months ago, the island was successfully holding out against the worst effects of the Asian crisis. But now devalued regional currencies are making Taiwan's goods less competitive, and each downward tick of the Japanese yen makes recovery seem that much further away. More important for the island's psychological state, there's the sting of political news. With a few pointed remarks in Shanghai, U. S. President Bill Clinton nudged America closer to full acceptance of China's Taiwan policy, which calls for reunification on Chinese terms. Clinton's trip undermined Taiwan's self-confidence and deepened its anxiety over the future.

GLOOM: *New U.S.-Beijing coziness worries the Taiwanese*

Yet there's an opportunity for Taipei to take bold action. It won't be able to counter newly cozy U.S.-Beijing ties. Instead, it should play to its strengths. Since Taiwan's survival depends largely on its economic might, it can benefit politically by increasing its regional economic clout.

WORST FEAR. Taiwan can do this in two ways: by loosening restrictions on local companies investing in China and by encouraging multinationals to use Taiwan as a jumping-off point for investing in China, especially now that expensive Hong Kong is in trouble. A Taiwan that is plugged into the region's fastest-growing economy and that becomes a regional center for multinationals can't help but be more relevant in the eyes of the world. It is already a world player in semiconductors, an indispensable part of the global PC business. Thus, Taiwan can insure itself against what it fears most—political dominance by, or forcible integration into, mainland China.

Leaders in Taipei, especially in the military, argue that closer economic ties would make the island all the more vulnerable to political pressure from Beijing. The fear is justified, and Taiwan should move carefully. But it can get closer to China economically without capitulating or acquiescing to Beijing's political demands. More links will encourage understanding between the sides, which can lower tensions. "China can influence Taiwan, and Taiwan can also influence China," says Cheng Tuan-yao, a political scientist at National Chengchi University. "You need to engage them first before you can exercise your influence."

> Taiwan should use its economic clout to become a power in the region

To become an entrepôt, Taiwan must lure foreign investors by revising outdated banking laws, attracting seasoned financial professionals, and slashing investment red tape. "We need foreign expertise to help us establish an international financial role," says Wu Chung-shu, an economist at Academia Sinica think tank. "Then, foreign firms would feel comfortable coming to Taiwan to invest in mainland China."

There are signs of movement in this direction. Following Clinton's visit to China, Taiwan's Economic Affairs Ministry indicated it may relax its "go slow, be patient" policy aimed at restricting direct investment in China. Taiwan companies have indirectly invested more than $35 billion, but Taipei continues to prohibit big projects. Taiwan's Formosa Plastics, which first aged into China despite the restrictions, is even being forced to sell its mainland power plant.

But instead of moving backward, Taiwan should forge ahead in promoting direct trade and transport links. While Taipei planners have long dreamed of the island replacing Hong Kong as a regional hub, it won't happen until managers can fly directly from Taipei to Shanghai.

Taiwan will need to open trade links with China anyway because it hopes to enter the World Trade Organization, which unlike the United Nations and World Bank does not require statehood for membership. By taking the initiative now, Taipei could take credit with Beijing for promoting good will. That would counter Beijing's attempt to paint it as the obstructionist in cross-strait relations. It also will help Taiwan as the two sides edge toward unofficial talks later this year. While Beijing's agenda is to push Taiwan under its sovereignty, an economically stronger Taiwan will be better able to resist.

Taipei has played hard to get with China for so long it will take a supreme effort to overcome political conservatism and inertia. But with Washington and Beijing inching closer, Taiwan must take strong measures to make sure its interests don't slip through the cracks.

Taipei-based Moore covers Taiwan business and politics.

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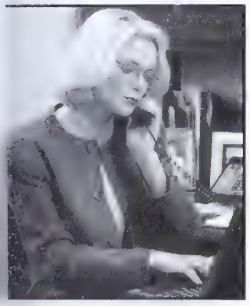

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FINANCIAL SERVICES

MAKE WAY FOR GE CAPITAL

It's a real challenge to Europe's banks

Not far from the center of Leeds in northeastern England is Burton Business Park, an industrial complex that dates from the 1930s. With loading bays that look like row houses and other antiquated flourishes, it seems a relic. But the 1,000 or so people working on the site for General Electric Capital Services Inc. are doing their bit to reshape Europe's economy.

At the beginning of the decade, GE Capital Services was a nonentity in Europe. Now, it is hard to avoid. If you apply for a Harrods store card in London, the Leeds operation will approve it. If you buy a Peugeot car in France, your purchase will likely be financed through Sovac, a lending company that GE Capital bought in 1995 for $1.5 billion. GE Capital can sell you health insurance for your dog through Pet Protect, a 1996 British acquisition. And it can provide a company with everything from a fleet of cars to shipping containers, modular office space, and time on a communications satellite.

OUTFLANKED? Stealthily, General Electric Co.'s financial wing has become one of Europe's biggest nonbank finance players. With footholds in some 20 business lines and in 21 European countries, it is already a leader in fleet and aircraft leasing and in consumer finance. So far, GE Capital Europe has grown through acquisitions, buying up more than 100 European companies or units with more than $30 billion in assets in the last few years.

That may have been the easy part. With the single currency approaching, the company is under pressure to integrate its businesses into an efficient, Europewide empire. If it succeeds, Europe's big banks could find themselves seriously outflanked. "We need to figure out the appropriate level of consolidation," says Daniel W. Porter, the new managing director of GE Capital Europe.

GE Capital is already hugely profitable, kicking in about 40% of GE's $8.2 billion in earnings last year. Europe has been a major contributor to its overall growth, with total earnings of $705 million in 1997, up 33% from 1996. But as Europe becomes integrated economically and shifts more toward services, the platforms GE Capital has established could become foundations for even more power. A few businesses, including equipment leasing and reinsurance, are already run on a Europewide basis. Others, such as auto and consumer finance, are likely to benefit from broad consolidation in the future. And GE Capital could realize big gains from merging back-office operations across Europe, perhaps across business lines.

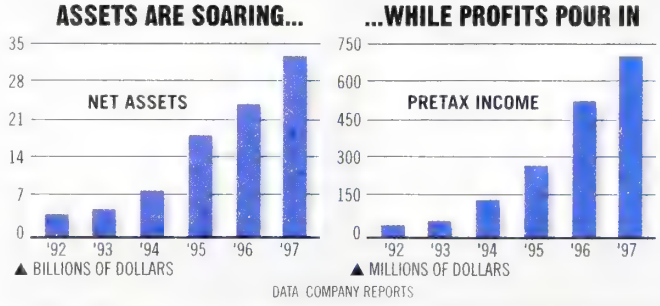
Strategically, GE Capital has taken the same course in Europe that has brought it success in the U.S.—snapping up unglamorous businesses in leasing, insurance, or consumer credit. The company puts in new management, if needed, and introduces more efficient technology and work methods. It combines companies in similar business lines

to gain economies of scale, and i tough targets for its managers.

And in the mid-1990s, Europe natural hunting ground for GE C Prices were lower than in the U. European finance was much mor mented. There wer gains to be made by ganizing businesses Europewide scale. It bet, says CEO Ga Wendt, that "Europe follow the U.S. and idate economically."

That bet turned be right on the mone prices for Western pean assets have risen. In the future, ger share of growt have to come from i

A EUROPEAN BONANZA



DATA COMPANY REPORTS

Capital's existing businesses, not
tying more.
Europe's banks, GE Capital is
for ways to cut costs and posi-
self for the euro. In Ireland, it is
up a Europewide multilingual
at Shannon to handle collections
European consumer finance—
ombining the work now being
several locations. But it is just
rested in boosting revenues. On a
f the Leeds facility, Andrew K.
who runs the business, points
group of telemarketers selling
oans or insurance to people who
ost their credit cards or moved.
re introducing more and more
n packages across consumer busi-
," he says.
re have been some hiccups
. Porter acknowledges that the first quarter was relatively flat. GE Capital was embarrassed also when its preliminary bid for Groupe des Assurances Nationales, a state-controlled French insurer, was rejected for being an hour late.

Another setback was the May departure of Porter's predecessor, Christopher Mackenzie, a British investment banker who had spearheaded the acquisition drive in Europe since 1994. Mackenzie was offered a promotion to head GE Capital's global acquisitions but left to join the New York buyout firm of Clayton, Dubilier & Rice Inc. Sources familiar with the situation say Mackenzie had argued with Wendt that a Europe-based head was needed to integrate the business lines. At present, most unit chiefs report to executives in the U.S. Mackenzie also tangled with headquarters in Stamford, Conn., over who should get credit for GE Capital's European successes. Wendt says that Mackenzie left to cut his travel schedule. Mackenzie declined to comment.

Now, Porter, a Californian, leads a team of 30 young merger specialists working in a nondescript office building in London. He acknowledges that the pace of acquisitions in Western Europe is likely to slow. But he sees big opportunities in Eastern Europe and in Greece, Italy, Portugal, and Spain, which are not as well covered by investment bankers.

SUBTLETY. In Eastern Europe, GE Capital's strategy is to buy struggling banks and retool them into distribution networks for its products. That is what it did with Budapest Bank Ltd., which it bought in 1995. Wendt says he has the same plans for Agrobanka Praha, a Czech bank that the company acquired at the end of June.

Porter's approach in Southern Europe is more subtle. With the single currency coming, he says, banks there fear being swallowed up by giants such as Deutsche Bank or the Netherlands' ING Bank. He thinks GE Capital can make inroads as a less threatening partner. It could take over management of a bank's leasing or insurance business, then build it up. Porter expects to announce such a deal soon.

Porter also says that GE Capital could gradually combine businesses on a much larger scale. It has already started: British, Scandinavian, and German reinsurance businesses, for instance, have been consolidated and are run from Munich. But "it's not clear how far you can take consolidation," says Porter. Knowing GE, the finance giant will probably find ways of taking the concept pretty far.

By Stanley Reed in London

HAPPY HUNTING

GE Capital bought up 100 businesses on the cheap, gaining a foothold in 21 countries—from car loans to department-store credit to aircraft leasing

EDITED BY JOHN TEMPLEMAN

SOUTH AFRICA: DISTURBING SIGNS OF DISARRAY AFTER MANDELA

South Africa's ugly brush with foreign-exchange markets raises some tough questions about its future. The rand, battered for weeks by a severe bout of Asian flu, hit a record low of 6.75 against the dollar on July 6—a loss of 28% since the start of 1998—just 48 hours after African National Congress stalwart Tito Mboweni was named to replace Christian L. Stals as governor of the Reserve Bank.

The currency steadied a bit later. But the incident may be just the first of many as the ANC's alliance with labor unions and the Communist Party frays in the runup to 1999 national elections. It also gave a foretaste of potential problems the ANC will have in ruling after revered President Nelson Mandela, 79, finally retires next year.

MBEKI AND MANDELA: *Stature gap*

Ostensibly, Labor Minister Mboweni, who has no banking background, was named in order to quash speculation about Stals's future. The technocratic Afrikaner was set to retire from the central bank in mid-1999, though there have been rumors that he might be bounced out early. In reality, however, the move was as much designed to mollify the ANC's left wing, which has been growing increasingly restive over the government's inability to create jobs. "This is an example of what we can expect to see in the next year," says Nick Barnardt, an economist at Johannesburg-based AMB Securities. "[ANC leaders] need to further enhance the feeling within the black population that they are running the country."

But the worry is growing that Mandela's designated successor, Deputy President Thabo Mbeki, will be unable to handle a deepening economic and political crisis as deftly as Mandela has. The President manages to remain above political brawls, even as the economy sours and demands amplify for more jobs, decent housing, and improved education. "Mandela could pull it off. But not Mbeki. He does not have the stature," says Steve Friedman, director of the Center for icy Studies, a Johannesburg research institute.

South Africa's economic crisis is deepening. Gold p have crashed. The prime lending rate is 24%, the highest el since political turmoil forced a state of emergency in mid-1980s. Unemployment is at 33%. And scaled-down jections now envision economic growth of just 1% this y

But the government, which Mbeki runs day-to-day, is pushing a policy it calls GEAR: growth, employment, and distribution. GEAR's lack of results so f increasing tensions between the ANC its allies, the 1.7 million-member Cong of South African Trade Unions and Communist Party. Both want to see new spending on public-works progr to cut jobless rates. Mbeki and his C net, leery of the reaction on global fi cial markets, are resisting that dogg

STANDING FIRM. Mandela has la dropped his usual aloof public stance come to Mbeki's aid. He gave the C munists a public dressing-down for sn at government policies. "GEAR is the damental policy of the ANC," he told early-July Party Congress in Johannesburg. "We are no ing to change it because of your pressure."

Mbeki, too, scolded critics at an earlier COSATU confer And he seemed to question the ANC's broad alliance, w has a 62% majority in Parliament: "When we speak o strategic alliance, are we speaking of something continues to exist, or are we dreaming dreams that r the past?"

Strained though it is, the alliance is likely to hold thr next year's elections. But after that, it could fall apart, ing South Africa into uncharted waters—without Man calming influence.

By Kathy Chenault in Johanne

GLOBAL WRAPUP

PAKISTAN DEBT MORATORIUM?

▶ Who says economic sanctions never work? Pakistan, penalized by the U. S. and its allies because of its nuclear-weapons tests, may have to declare a moratorium on servicing some of its approximately $30 billion of outstanding foreign debt. Finance Minister Sartaj Aziz said on July 8 that the moratorium could start soon unless flows of foreign-currency aid resume.

Prime Minister Nawaz Sharif has been holding urgent talks with International Monetary Fund officials. He wants the IMF to release further tranches of $1.6 billion in credit that was approved last October, before the nuclear tests. Disbursements are blocked by sanctions, which Pakistan argues shouldn't be be applied by the IMF.

MEXICO CUTS OUTLAYS AGAIN

▶ Low oil prices are forcing Mexico to tighten its fiscal belt another notch. On July 8, officials axed an additional $600 million of spending from the country's $100 billion budget for this year. Half the money come out of Petroleos Mexicanos' exploration budget. Cuts decided so far this year now total $3.45 b lion, or nearly 1% of gross domes product.

Officials say the economy may s grow 5% this year, and they vow t keep the budget deficit at the prev ously planned 1.2% of GDP. Mexico estimated its crude oil would sell f an average $15.50 per barrel in 19 But prices are now about $10.30, a the energy ministry expects them average $11.50 for the year.

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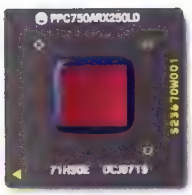

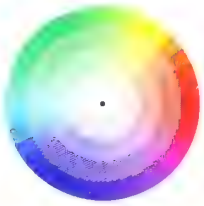

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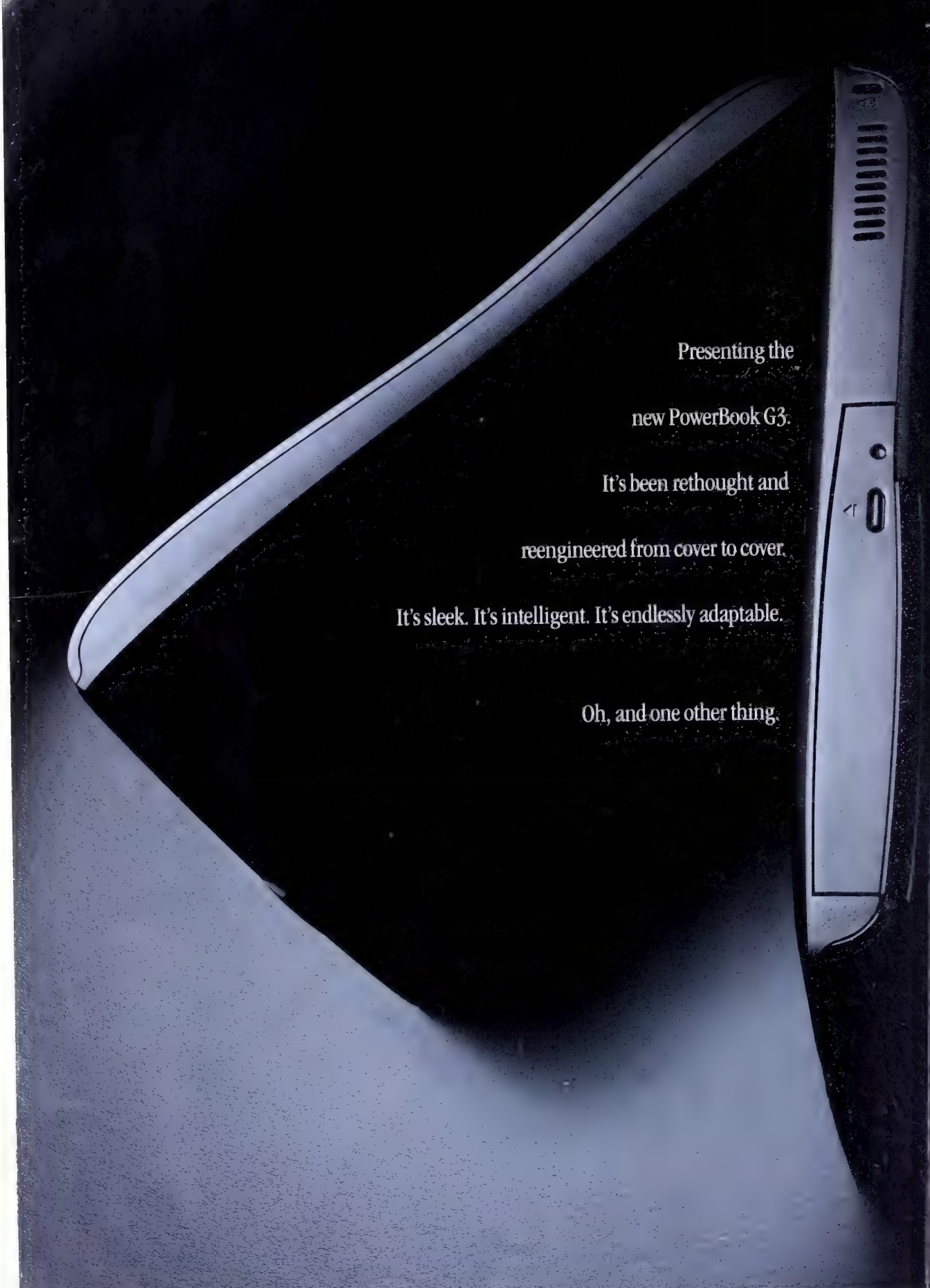
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13.3-inch TFT XGA Screen Starting at $2,999*	233MHz G3 processor 32MB memory 4MB SGRAM 2GB hard disk 20x CD-ROM, floppy drive S-Video out	250MHz G3 processor 1MB backside cache 32MB memory 4MB SGRAM 4GB hard disk 20x CD-ROM, floppy drive K56flex modem S-Video out	292MHz G3 processor 1MB backside cache 64MB memory 4MB SGRAM 4GB hard disk 20x CD-ROM, floppy drive K56flex modem S-Video out
14.1-inch TFT XGA Screen Starting at $3,499*	233MHz G3 processor 32MB memory 4MB SGRAM 2GB hard disk 20x CD-ROM, floppy drive S-Video out	250MHz G3 processor 1MB backside cache 32MB memory 4MB SGRAM 4GB hard disk 20x CD-ROM, floppy drive K56flex modem S-Video out	292MHz G3 processor 1MB backside cache 64MB memory 4MB SGRAM 8GB hard disk 20x CD-ROM, floppy drive K56flex modem S-Video out

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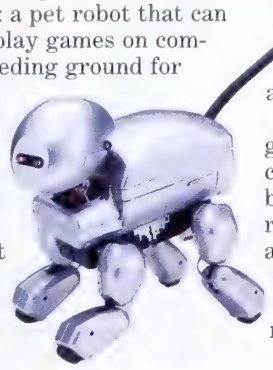
ED BY NEIL GROSS

AN'S BEST FRIEND– ID NO SCOOPER NEEDED

SEVERAL YEARS, ENGINEERS AT SONY 'p. have been working on what they the ultimate toy: a pet robot that can k, lie down, and play games on com- ıd. At Sony's breeding ground for tal critters—a yo lab known as 'l"—engineers eloped a proto- e (right) that le a splash at ɔoCup '98, a robot nt held in Paris uly. ɔon't be fooled by appearances. This 2.8-pound robot looks like a puppy, but it packs a 64-bit central processing unit, 8 megabytes of memory, and a supersensitive camera "eye." Stick out your hand suddenly, and it will sit.



More important, says Sony, the dogbot is reconfigurable, so the owner can swap out limbs, or even the head, and reprogram the entire instruction set.

Each module in the dogbot is "intelligent"—outfitted with its own motor and control chip. So a four-legged canine can be transformed into a two-wheeled rolling robot. Toshitada Doi, head of the D21 lab, anticipates a consumer market for kids sometime around the turn of the century. By then, dogbots could give real Rover a run for his money. *Irene M. Kunii*

THE E.R., IN ARTBEAT

ATTACKS ARE SOME- tough to diagnose. es reveal that as many of sufferers who show emergency rooms get agnosed. Now, a Toron- npany claims to have a ostic blood test that rs nearly 100% accura- just 15 minutes. This ıer, pending Food & Administration val, Spectral Diagnos- ıc. hopes to begin mar- a new generation of its ac STATus test in the The handheld plastic e detects three pro- -myoglobin, troponin I, -MB—that are sloughed the heart at different of a cardiac problem. test's chief virtues are reliability, and simplici- ys Dr. Isser Dubinsky, of emergency medicine onto Hospital, who has redecessors of the new A technician puts in a ops of blood: If the pa- as had an attack, pur- ines appear on the de- TATus will sell for about r test. *Joseph Weber*

ON A FAST TRACK TO STOP TRAIN WRECKS

A CRACKED WHEEL IS WIDELY BELIEVED TO BE THE CAUSE of the worst rail disaster in Germany's history, on June 3. The faulty carriage derailed, killing 102 passengers.

To prevent future crashes, two separate research teams in the U.S. are working on techniques for finding hidden flaws in train wheels—and, perhaps more important, in the rails down below. By the end of this year, the Association of American Railroads will select one of the two approaches for further development.

One method, from Massachusetts Institute of Technology, utilizes the Doppler effect—the shift in pitch you hear as a sound recedes or approaches. A laser mounted on a moving train creates a burst of heat on the rail. The thermal shock generates high-frequency sound waves inside the track. When the waves hit a crack, the frequency shifts, and a receiver on the train picks up the change.

PREVENTABLE? *Germany's worst*

The second method, developed by Karta Technologies Inc. in San Antonio, uses special circuits mounted on the train to generate changes in the electromagnetic field of the metal rail below. These changes cause a swirling electronic effect in the rail known as an "eddy current." As the train races along, on-board sensors detect changes in the eddies caused by defects in the rail.

Both techniques offer improvements over current ultrasound approaches. Cars that inspect the rails now travel at about 15 mph. Future cars will average 60 mph. *Nellie Andreeva*

TINY BACTERIA MAY GIVE RISE TO KIDNEY STONES

NASTY MICROBES MAY BE THE source of more misery than medical science has realized. A growing list of cancers has been linked to bacteria and viruses, as has atherosclerosis. Now, kidney stones may join the roster.

The culprit seems to be one of a newly discovered breed of microorganisms dubbed nanobacteria because they're extremely small. They're so tiny that they shouldn't even be alive, according to classical criteria, says their discoverer, Dr. E. Olavi Kajander, a researcher at the University of Kuopio in Finland. The nanobugs may have gone undetected until now for another reason, apart from their size: They hide inside tiny shells that they build around themselves. "The carbonate-apatite shells, or caves, really fascinated us," says Kajander.

Analysis of the shells revealed them to be strikingly similar in composition to the mineral clusters found in kidney stones and calcium deposits in blood vessels. So Kajander and microbiologist Neva Ciftcioglu dissected 30 human kidney stones. Sure enough, they found nanobacteria in every stone. And when they infected healthy human cells with the nanobacteria, the cells developed mineral deposits both inside and outside, according to a report that was published in the July 7 issue of the *Proceedings of the National Academy of Sciences.*

Establishing a direct causal link will take more sleuthing. That's now under way, with help from NASA researchers. Kajander says he is confident he will soon be able to submit a paper proving that nanobacteria cause human kidney stones. *Otis Port*

FOR FURTHER INFORMATION: Go to Business Week Online at America Online or E-mail dtwjuly@businessweek.com

PATENTS

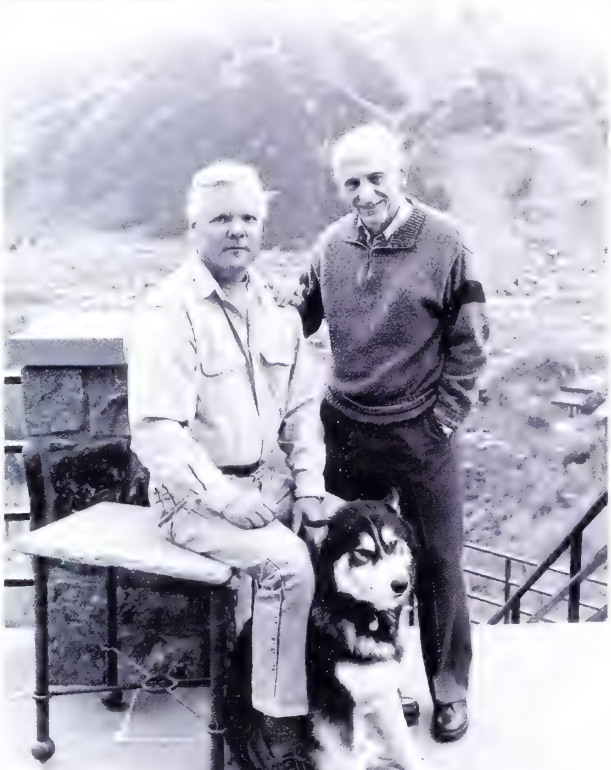
SUDDENLY DETROIT HAS A HUGE NEW BILL TO PAY

The Big Three settle with the estate of prodigious inventor Jerry Lemelson

On June 8, with little fanfare, America's Big Three auto makers agreed to fork over a fortune in patent fees to a foundation created by inventor Jerome H. Lemelson. Hundreds of parts suppliers may also get roped in, pumping hundreds of millions into the Lemelson Foundation's coffers. That's no small feat, given that the inventor himself is dead and some his patents were filed four decades ago.

While the terms of these deals are part of a secret out-of-court settlement, the auto makers are probably paying a percentage on each car sold so they can continue to equip their assembly lines with bar-code readers and other automated inspection gear. The Big Three pioneered many of these applications. But the Lemelson Foundation insists the technology is covered by patents the inventor filed in 1954.

Courts were inclined to agree in pretrial decisions last year, which is why the Big Three buckled in June. A few days later, parts suppliers serving the Big Three began receiving letters announcing "exceptionally favorable terms" on licenses to Lemelson's patents. Some of the letters were signed by Gerald D. Hosier, Lemelson's patent attorney since 1989, who now represents the foundation. Other letters came from the Big Three. All state that the special offer expires on Nov. 22, implying that costs will rise after that date.



HOSIER AND LEMELSON: *In 1992, foreign carmakers accepted their offer for a deal; the Big Three didn't*

PERVASIVE TECHNOLOGY. Autos are just the beginning. Hosier has indicated that any company using "machine-vision" technology could be a Lemelson target. That worries David Y. Peyton, director of technology policy at the National Association of Manufacturers in Washington. "Bar coding is pervasive throughout the economy," he says. Warns Timothy J. O'Hearn, partner in intellectual property practice at law firm Jones, Day, Reavis & Pogue: "If everyone just takes out a checkbook, these patents will become an industrywide tax by the Lemelson Foundation."

Neither Hosier nor the Big Three—nor the dozen parts suppliers contacted by BUSINESS WEEK—would disclose license terms. But earlier deals shed some light. In 1992, a dozen Japanese auto makers settled with Le son over this same set of code patents. It cost them a $100 million as a one-time ment in lieu of ongoing pa royalties. The sum was calcu ed as a royalty of one-fiftiet 1% of each company's aver car price multiplied by the n ber of cars they would sel the U. S. in a decade.

The Big Three spurned a ilar offer, however. So their J deal was probably more co That was Lemelson's wish, a way. In May, 1997, he told B NESS WEEK the license terms tained by Japan were desig to reward the companies that sponded promptly. "We won't ward the ones who fought patents," he said.

Where does all the money The bulk, minus lawyers' f now flows to the Lemelson F dation, which is headed by inventor's wife, Dorothy. Its isting programs include $500,000 Lemelson-MIT P awarded annually since 199 Massachusetts Institute of T nology to an outstanding inventor. The foundation also ports educational programs i novation at the Smithsonian stitution and three dozen universiti

Most of this wealth derives fr patent application filed in 1954. Le son was an unknown inventor then he would eventually win some patents—making him the No. 4 pa champion, behind Thomas Edison, Thomson, and Edwin Land. Th Lemelson didn't invent bar codes se, his 1954 application described va techniques for linking computers cameras to collect data and to pr the results. Ultimately, it produc cluster of 18 patents that cover r

A lawyer for auto-parts suppliers fears that the pat

systems as well as bar-
ystems. The last patents
group were granted in
after 38 years of hag-
with the U.S. Patent &
mark Office. That's when
son demanded royalties
all manufacturers that
ar codes, especially the
s auto makers.
companies were in-
d. By 1992, bar-coding
ecome ubiquitous in the
ndustry. Today, these la-
re the basis of comput-
inventory controls. And
e used, for quality pur-
to track almost every
lual part in the factory
the marketplace.
entice companies to buy
ise, Lemelson offered a
ge deal: the rights to all
ents, in perpetuity, for a
um payment. Japanese
European auto makers
signed on, along with
of their parts suppliers.
onics giants such as Mo-
NEC, and Philips also
p to avoid further suits.
ld, more than 100 companies
deals, funneling—through 1997—
550 million to Lemelson, his foun-
and attorney Hosier, whose fees
un as high as a third of the ne-
d settlements.

FORD ASSEMBLY LINE: *Bar codes are ubiquitous in Detroit—and just about everywhere else*

RGED THREAT. When Detroit re-
o knuckle under, Lemelson sued
g Three. But the cases against
l Chrysler were tabled pending
come of Lemelson vs. Ford Mo-
The turning point came in April,
when a Nevada U.S. District
pulled the rug from under Ford's
y by ruling that Ford couldn't
he issue of so-called submarine
s during a trial.
term "submarine" has huge res-
in patent circles. Coined by
son's critics, it implies that the
r deliberately stalled some of his
applications en route to publica-
he goal, critics say, was to wait
e technology was in general use,
rface with the patent and spring
undreds of unsuspecting compa-
o had come to rely on the tech-
Critics howled loudest about
on's 1992 bar-code patent, which
underwater for 38 years.
elson and Hosier have vigorously
ited the submarine accusation,
no struggling inventor would de-
ly incur such delays. But indus-
nguish over massive submarine patent fees helped propel a 1995 revamping of U.S. patent laws.

Submarine talk, however, didn't hold water with the federal circuit court. When Ford appealed the Nevada decision, the court declined to hear the case in July, 1997. Out-of-court talks started soon after, leading to last month's settlement. "Jerry knew we were probably going to win before he died," says Hosier. In October, 1997, cancer robbed Lemelson of his chance to witness Detroit's defeat.

It's too soon, however, for the Lemelson Foundation to count its new riches. Some suppliers may hold out for more favorable terms or take court action. "There are many solid arguments that were never decided in the Ford case," says O'Hearn of Jones, Day. His firm is already working with one group of suppliers and is urging others to join forces to address the licensing requests.

Even if suppliers balk, however, the machine Lemelson set in motion will keep humming. The current roster of licensees barely scratches the surface of bar-code users in such industries as computers, machine tools, packaged foods, and pharmaceuticals. And more Lemelson patent applications are still at the Patent Office, under Hosier's watchful eyes. So Lemelson could end up casting a very long shadow.

By Neil Gross and Otis Port, with Nellie Andreeva, in New York

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CLONING

BARNYARD BIOTECH BREEDS HIGH HOPES

How Dolly and friends could lead to fat profits

First came Dolly, the famous cloned sheep from Scotland that spawned a huge ethical debate in February, 1997. Then came Gene, a Wisconsin-born cloned calf.

Since then, science has created a herd of biotech animal wonders, including not only clones but so-called transgenic creatures whose genes have been altered. Two sheep named Polly and Molly, for example, were engineered by Dolly's creators to make a drug in their milk. And a family of seven transgenic cattle, cloned by a Worcester, Mass., company, was described in June at a scientific clone fest in Washington.

PALS FOR DOLLY. Most recently, researchers in Hawaii and Japan say in tantalizing reports that they have replicated in mice and cattle the most startling claim about Dolly—that she was cloned from an adult animal cell. Dolly, finally, "is not alone," says gene engineer Ryuzo Yanagimachi of the University of Hawaii.

The question now is: Are Dolly and her biotech barnyard kin the stuff of big profits as well as headlines? The answer won't be clear for many years, but a number of companies are betting that there is indeed money to be made. A new industry is taking shape around the twin technologies of transgenics and cloning. Companies such as Genzyme Transgenics in Framingham, Mass., PPL Therapeutics PLC in Scotland, and Pharming in the Netherlands are investing millions to develop transgenic drug-producing rabbits, goats, cows, and other animals. They are also linking up with new cloning companies, including Advanced Cell Technology Inc. (ACT) in Worcester and Infigen Inc. in DeForest, Wis., who envision such additional products as cloned herds of disease-resistant steers. "Cloning will enter the commercial market within two years," predicts James M. Robl, co-founder of ACT and a professor at the University of Massachusetts.

That may be a little too optimistic. After all, scientists working with malleable embryo cells have been able to clone livestock for more than a decade. Indeed, back in the 1980s and early 1990s, a hyped commercial industry that was based on cloning "fell flat on its face," says Charles R. Looney, a veteran

of one failed company, who now h
Ultimate Genetics, a small Texas sta

Since then, however, the science made great strides. One breakthr has been showing that specialized such as those already on the pat becoming skin, could be reprogram to recreate entire animals like D or the Worcester Seven. An breakthrough is coming through marriage of cloning to the related nology of transgenics.

To create transgenic tures the traditional scientists inject DNA di into eggs or embryo But that's a notorious efficient process. Resea may run through 25,000 to produce fewer th dozen transgenic ani says Steven L. Stice, scientific officer at What's more, the res animals typically don't the desired gene in all cells, and must be r through a generation c of breeding.

Cloning could chan that. Scientists can fir the desired gene to and then clone the ce evinces the desired tr fact, boosting the effi

A BRIEF HISTORY OF CLONES

1952 U.S. scientists Robert Briggs and Thomas J. King succeed in cloning a frog from a frog embryo cell. But they and others can't duplicate the feat with adult cells.

1986 Danish embryologist Steen Willadsen says he has cloned sheep by removing nuclei from egg cells and adding an embryo cell. Neal First at the University of Wisconsin next succeeds in cows.

MARCH, 1996 The Roslin Institute in Scotland announces that it has cloned healthy calves from fetal cells.

FEBRUARY, 1997 Ian Wilmut of the Roslin Institute unveils the sheep named Dolly, the first mammal said to be cloned from adult cells.

MAY, 1998 Wilmut and his colleagues introduce Molly and Polly, two genetically identical lambs carrying human genes that produce a blood-clotting factor for treatment of hemophilia.

JANUARY, 1998 Two University of Massachusetts scientists, James Robl and Steven Stice, report that they have cloned calves from fetal cow cells using a method they say is simpler and more efficient than Wilmut's.

JULY, 1998 Researchers in Hawaii and Japan separately announce that they've bolstered Wilmut's claim that Dolly was cloned from an adult. The Japanese say they've cloned cows, while the Hawaiian result is with mice.

ıe-altered animals can be productive drug :ories. These Genzyme Transgenics goats ‹e a human clotting factor in their milk

ducing transgenic animals was the ıat first inspired Dolly creator Ian t of Scotland's Roslin Institute. works. Starting with fetal skin ACT scientists were able to make transgenic calves in 876 tries—a ain. "We've shown it's feasible to ansgenics and cloning to produce s," says Stice.

advances are brightening the cts of turning animals into living aceutical factories. Already, Gen-Transgenics, PPL, and Pharming enetically engineered mice, rab-oats, sheep, and cows to make of different proteins. Pharming, ance, is working with the Amer-ed Cross to make cows that produce fibrinogen, a protein ca-f stanching blood flow from even wounds. It can be extracted from d blood, but there's not nearly to meet the expected demand. brinogen is too complex to be y the biotech industry's so-called inant method of using gene-al-acteria or yeast.

In contrast, transgenic animals can not only make fiendishly complex proteins but can often do it at a fraction of the cost. After all, scaling up production is easy. "You virtually stick the animals in a field and let them get on with it themselves," says Julian Cooper, COO of PPL Therapeutics. In fact, the biggest cost of making drugs in animal "biofactories" is purifying the desired substance from the animals' milk, not creating the animals in the first place.

The ability to make large amounts of once rare drugs cheaply could bring new uses for the drugs, says biotech analyst and Senior Vice-President Mary-Ann Gray of Raymond James & Associates. William Drohan, senior director of plasma development at the American Red Cross, for instance, expects that large amounts of fibrinogen will make possible everything from bandages and powders that rapidly stanch bleeding to an expanding foam that can plug internal holes from gunshot wounds. "It's the first major change in treating bleeding since gauze was discovered 3,000 years ago," he says.

Just making proteins in bulk, however, isn't a very sexy or lucrative business. That's why companies such as Pharming and PPL hope to become drug developers as well as transgenic experts. One of PPL's lead products, for instance, is a natural enzyme called alpha-1-antitrypsin. It can dampen the inflammatory reaction that damages the lungs of cystic fibrosis patients. Previous clinical trials were inconclusive because companies couldn't supply enough of the protein to test it properly. Now, PPL has 700 transgenic sheep making the protein in their milk. Phase II clinical trials are under way in Britain, with U.S. trials expected later this year. "If it can reduce the inflammatory response as we hope, it will add many years to people's lives," says Dr. Robert J. Beall, president of the Cystic Fibrosis Foundation.

Scientists see even bolder things ahead. They envision knocking out the gene for the proteins that turn lethal in mad cow disease, for instance, creating herds of cattle impervious to the scourge. As the cloning of adult animals becomes more efficient, companies plan to use cloning to copy valuable animals such as top semen-producing bulls. And they expect to create pigs with added human genes and deactivated pig ones, so that pig organs can be transplanted in people without being rejected.

MANY FAILURES. But all of this faces daunting scientific and regulatory hurdles. Indeed, researchers are still struggling to understand why cloning leads to far more failed pregnancies and dead or deformed animals than to successful live births. "We need to find out why 99% of attempts are failures," says cloner Tanja Dominko of the Oregon Regional Primate Research Center. "It's still one of the biggest problems in the industry."

Then comes the challenge of producing viable medical products. "Transgenics and cloning are at a crossroads," asserts Paul Rohricht, U.S. business development manager for PPL. "We have to prove ourselves by getting products in the clinic and approved." It can be difficult to purify drugs made in animals' milk. And because these are radical new methods, regulatory agencies will be looking for extra proof that the products are safe. Once those hurdles are cleared, Dolly and the whole biotech barnyard will be much more than scientific curiosities.

By John Carey in Washington, with Geoffrey Smith in Boston

THE INTERNET

HOW THE INTERNET WORKS: ALL YOU NEED TO KNOW

To see how big carriers could control the online world, you must understand its structu

Finally. After nine months of nasty public sparring with competitors and intense regulatory scrutiny, WorldCom Inc. is on the verge of clearing the highest hurdles to its proposed $37 billion merger with MCI Communications Corp. On July 8, the European Commission gave its tentative blessing to the deal—only after forcing MCI to sell off its entire Internet business and making the company agree not to solicit its existing Net customers in the future. The U.S. Justice Dept. and the Federal Communications Commission will probably give the green light in the next several weeks.

What's occurring is nothing less than the first antitrust debate over the Internet. The issues now being decided are likely to set precedents that will affect how quickly the Net grows and which companies will play leading roles in its evolution.

Still, many of the key issues in the debate are not well understood. For one, people find the idea of Internet dominance baffling. The Net's growth has been so explosive—in the number of users, Web sites, and even carriers of Net traffic—that it's difficult to understand how one company or a handful of companies could dominate it. To understand why there are concerns, you need to understand how the Internet backbone functions. What follows is an examination by Washington Correspondent Catherine Yang on how the backbone works and why large carriers have the potential to control the Net.

How does E-mail travel on the Internet to reach someone far away?

When Jennifer, who lives in Pasadena, Calif., wants to send an E-mail message from her home computer to her mother in Washington, D.C., she uses a local Internet service provider (ISP) such as EarthLink Network Inc. EarthLink gives Jennifer access to the Internet, much in the way that an on-ramp puts a driver on the national highway system.

After Jennifer's computer makes a lo-

WHAT WORRIES THE FEDS

In order to provide the ubiquity that lies at the heart of the Internet, a company that wants to carry Net traffic has to connect with other Net carriers. What concerns government regulators is that if one carrier gets much bigger than the others, the giant will be able to exert control over the fees and terms of interconnection. Already, three Internet backbone carriers—MCI Communications, Sprint, and WorldCom—provide connections to roughly 75% of Internet destinations, according to *Boardwatch Magazine*. Smaller companies attract the remaining traffic by offering lower prices or better customer service.

1 Suppose **USER A** in New York wants to send a
across the Internet to **USER Z** in Seattle. Use
customer of Zippy Inc., a small Internet ser
provider (ISP), and User Z uses a different
act like on-ramps to put drivers on the Infor
Highway system.

2 To connect its customers to the Net, Zippy
with a company that links Zippy to the rest
Internet. Zippy chooses one of the smaller c
Frontier.

3 Zippy sends its traffic, including User A's E-
Frontier. But Frontier's network is not linked
ISP of User Z, so Frontier needs to contract
another Internet carrier to route User A's E-
mail. There are two ways Frontier can hook
up to another carrier: as a **PEER** or as a
CUSTOMER.

PUBLI

PEER

elephone call to EarthLink's local of modems, Jennifer types in her E- message and hits "send." Based on s E-mail address, EarthLink will nize that Mom is a customer of an Washington called Erols Internet 'arthLink will then send the E-mail Internet "backbone provider," such : Corp., to route it along its way.

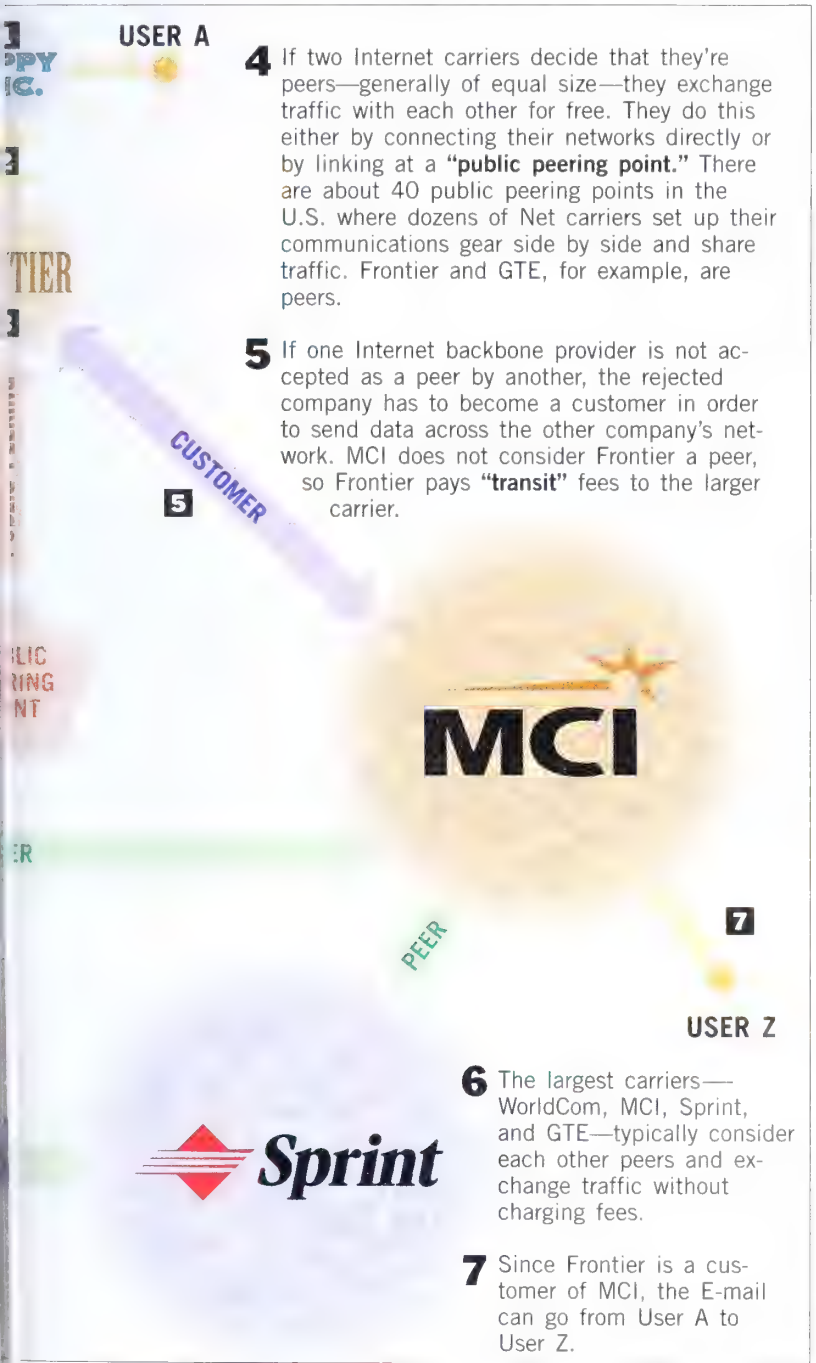
is a backbone provider and why is ortant on the Internet?

one providers are the Internet s that typically own and lease long- iber-optic cables spanning a large . They also own the communica- gear that directs traffic over the Internet. There are only a handful of major backbone providers, including MCI, WorldCom, Sprint Corp., GTE, and PSINet Inc.

Backbone providers connect to each other to exchange data between their customers. They also pick up and deliver traffic for a fee from the 7,000 or so smaller ISPs, who give residential and small-business users access to the Internet. Backbone carriers are like the highway system over which most of the freight of the Internet travels to reach its destination.

How did the current backbone providers come to be?

When the Internet was still a government-run system, there was only a single Internet backbone: the NSFNET, operated by the National Science Foundation, which connected the regional government-funded Internet networks that were run by various research universities. When the government privatized the NSFNET in 1995, companies such as MCI, UUNET Technologies (now owned by WorldCom), BBN (now owned by GTE), and PSINet stepped into the breach by setting up commercial Internet backbone services. Now, instead of one NSFNET backbone, there are many of them that link together to provide the global connectivity that is the Internet.



Why is one company's dominance of the Internet backbone potentially anticompetitive?

MCI and WorldCom handle the traffic for many of the Internet's most popular Web site destinations, as well as the Web sites of many large companies. Customers of other Internet carriers—both backbone providers, such as GTE and Sprint, and ISPs, such as Erols or MindSpring—will want to reach the popular Web site destinations and customers served by MCI-WorldCom. That could give MCI-WorldCom leverage to charge unfairly high prices for linkups. And those high costs of interconnection could make it harder for new entrants to survive. There are exceptions, however, including America Online and Microsoft Network, which use multiple backbone providers—so there are alternative routes to their customers.

Do MCI and WorldCom have a large enough share of the Internet to squeeze competitors?

Probably. The EC says the two companies together would dominate 45% to 65% of the revenues and traffic of the Internet backbone. Trustbusters believe that's enough for MCI-WorldCom to impose unfair prices and to thwart competition. MCI and WorldCom vehemently disagree with the EC's market-share figures, saying that they jointly account for a mere 20% of all revenues on the Internet.

In truth, little reliable market-share data is available because the amount of traffic transported by various carriers is proprietary information under private contracts. The Justice Dept. sent out civil subpoenas to major Internet carriers earlier this year to determine these numbers. However, it has not yet released its findings. The EC developed its market-share data with the help of industry players.

How do Internet companies connect to each other?

When the NSFNET was privatized, the

government set up three locations in the U.S. where various Internet backbone companies could place their communications gear side by side and connect to each other. These so-called "public peering points" are in Chicago, Palo Alto, Calif., and Pennsauken, N.J. Later, the government sanctioned two industry-run public peering points called Metropolitan Access Exchange East and West—MAE-East, in Vienna, Va., and MAE-West in San Jose, Calif.

The problem was, as the Internet grew, the public points became overburdened and traffic slowed at these bottlenecks. So backbone providers started making arrangements with each other, called "private peering." These are direct, bilateral connections between two carriers in which no fees are charged.

How does a backbone company get to become a "peer"?

Large backbone companies, such as MCI, WorldCom, Sprint, and GTE, all have their own separate criteria for which companies they will accept as peers—that is, the carriers with which they'll exchange traffic without any payment. Backbone carriers, such as GTE and Sprint, often do not make these criteria publicly available—but others do. WorldCom's UUNET Internet unit, for instance, requires peers to have a national network that will connect with UUNET at four or more locations with superfast DS-3 lines, which transmit information at 45 million bits of data per second.

Big backbone companies are getting pickier about their peer selection because they feel that they can't afford to share the huge investments they have made in their networks with all comers. "Physically, we cannot possibly peer with all 7,000 ISPs," says John W. Sidgmore, vice-chairman of WorldCom. The companies that don't meet their criteria have to become paying customers, much like ISPs, or look around for other backbone providers who will peer with them.

Can new entrants in the backbone business compete successfully?

It's more difficult now to become a peer. Carriers building high-capacity networks, such as Omaha-based Level 3 Communications Inc., are frustrated that they haven't been able to strike peering agreements with major backbone providers. They fear that the established backbone companies have an incentive to keep them out of the game, since the new players could overtake the old-timers with their well-capitalized, next-generation networks. "The very people Level 3 has to interconnect with are the very people who have the most to lose," says Ron Vidal, senior vice-president at Level 3.

Smaller backbone providers say they often don't know why they're rejected as peers. They're afraid the big companies use secret and arbitrary criteria to deny them peering relationships, thus raising their costs and harming their service. The old-guard companies say they are turning them down because these newcomers often don't have many customers. They say they will accept the newbies as peers once they build up significant traffic to exchange. There are no industry or government standards for peering criteria.

Do the largest backbone providers charge each other?

Backbone providers aren't charging peers now, but there is a lot of dis sion about whether they should. I industry experts say the Internet n to develop some payment scheme. ter all, it is now a commercial, pr making business, not a governn freebie.

But the industry has not figured how to calculate who owes wha whom. Without an industry standar government regulation, smaller co nies fear that larger ones will set t charges in an arbitrary and discrin tory fashion. There could be a l "cockamamie measurements," Leonard Kleinrock, an ternet founder and com er science professor at University of Californi Los Angeles.

What is the solution to guarding competition on Internet?

Since the Internet was vatized, it has grown leaps and bounds into markably successful munications medium out government regula —and most want it to that way.

But the Internet has tured to a point that uniform rules are ne to safeguard competi As a first step, exp argue that backbone viders should have to close the criteria for coming a peer. This w allow companies to whether they are being criminated against.

An industry group the Global Internet ect—whose member clude such major back providers as MCI, GTE AT&T—is developing a longer-ter lution. The group advocates a fai public system under which all bone providers would pay each for carrying Net traffic.

"We need a market mechanis ensure peering for all," says D Schulman, president of AT&T Wor Service, a project member. Mar sues need to be worked out, incl who would do the policing. Still, w clear payment system, those wh afford to pay the price can be peers. Peering would be deter by the market rather than by vate company with its own cor tive interests.

Top Internet Backbone Companies

Market share based on percentage of Internet service providers connected to a company's network

MCI COMMUNICATIONS launched its commercial backbone service in 1994, after having helped build the NSFNET, the government-sponsored predecessor to the Internet. MCI's top Internet engineer, Vinton G. Cerf, co-invented the packet-switching protocol that is the basis of Net communications today. MCI has agreed to be acquired by WorldCom. **Market share: 31%**

SPRINT started its commercial service in 1992 and now sells to both residential and business users. Sprint has filed complaints with both U.S. and European regulators over the Internet wallop of the MCI-WorldCom merger. **Market share: 22%**

WORLDCOM When WorldCom bought Internet company UUNET Technologies in 1996, along with its parent phone company MFS Communications, WorldCom CEO Bernard Ebbers professed not to appreciate the Internet. Since then, WorldCom has become an Internet leader, gobbling up ANS Communications and CompuServe in 1997. Customers include America Online and Microsoft Network. **Market share: 20%**

GTE entered the backbone business last year when it bought BBN, which helped build the first government-run Internet, ARPANET, in 1969. GTE, a critic of the MCI-WorldCom merger, filed an antitrust lawsuit opposing the deal. It offers service to 5,000 business customers and 500,000 dial-up residential users. **Market share: 4%**

DATA BUSINESS WEEK, *BOARDWATCH MAGAZINE*

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THE INTERNET

A SITE OF ONE'S OWN

Women flock to iVillage for info and community

It's 9 a.m. on a Thursday, and the messages in the recipe chat room on iVillage's Web site are flying fast. Members exchange advice about making jams and preserves between running to the kitchen to get Pop-Tarts and bathing their children. For iVillage, it's a regular day in the neighborhood. "The sense of community, togetherness, and support is what this is all about," says Brenda Hafer, who began visiting iVillage during her pregnancy 2½ years ago and now manages chats on the site.

Women are becoming a force on the Net, and iVillage is reaping the benefits. After years of being dramatically underrepresented, women now make up 43% of online users, up from 35% in 1996. What's more, 55% of next year's first-time Net users are expected to be women, forecasts Forrester Research Inc. Why the increase now? As the number of U. S. homes with PCs climbs to a predicted 45% next year, the Web is fast becoming more of a communications medium for the masses.

That could make iVillage, the No. 1 women's site, the Lifetime channel of the Web. With its information on topics ranging from parenting to retirement planning, iVillage already is drawing a crowd. In May, the New York-based startup pulled in more than 3 million different users. That's fewer than one-tenth the number of visitors to the No. 1-ranked Yahoo! site, yet it's more than twice the viewership of rival women's sites, including those backed by magazine giants Hearst and Condé Nast Publications, according to ratings service Media Metrix.

PROFITS IN VIEW. Revenue is rising, too: It is expected to triple this year, to $20 million, and double again in 1999, says Hambrecht & Quist analyst Paul Noglows, who also predicts profits next year. Those results have iVillage pondering a public offering later this year or early next year.

What is iVillage's appeal? Above all, it has created a sense of belonging that keeps people coming back. At any one time, there are some 1,400 ongoing discussion boards, which bring together groups of like-minded women who share experiences or help each other solve problems. Such exchanges have been at the core of the company's strategy since it launched its flagship Parent Soup site in January, 1996, on the Web and on America Online Inc., which owns 15% of iVillage. "Women are so pragmatic and time-pressed—they use the Web to find out how to get things done," says Chief Executive Candice Carpenter, a single mother of two children, a rock climber, and a former Outward Bound team leader who came up with the idea for iVillage while working as a consultant to AOL.

Still, iVillage's early lead doesn't guarantee continued success. Some sites, including HomeArts and CondéNet, have deep pockets and the ability to cross-promote across other media properties. "We have brand—that's important when people are dealing with a new medium," says Kathryn Creech, general manager for HomeArts, which is owned by Hearst, the publisher of *Cosmopo* and *Redbook* magazines. If iVilla going to keep its lead, it needs ways of directing people to its says analyst Yvette DeBow of Ju Communications.

HIGHER PROFILE. iVillage is hatch scheme to broaden its appeal. Last the startup created an umbrella si der the iVillage name and added new information areas—includi nance, relationships, and workin home. The company also is expa its Better Health site, which health information. And iVillage is ing to get its name out more a sively. By summer's end, it expe announce a partnership wit broadcasting company tha give it wider promotion.

iVillage also has big pl cash in on E-commerce. V typically make about 75% purchases in the brick-an tar world, and that is ex to be mirrored in cyberspa March, the company ac iBaby, a Web site that sells products, and iVillage plans quire more retailers, includi that sells health products. all, in iVillage's view, the W woman's world.

By Heather Green in Ne

FIRM GRIP: *CEO Carpenter is an ex-Outward Bound l*

A TOUR OF iVILLAGE

BETTER HEALTH Launched on the Web in September, it offers chat and information on subjects ranging from heart disease to cancer

PARENT SOUP This flagship Web site caters to parents by offering daily family polls, chats with doctors, and a book club that's part of a partnership with Amazon.com

ARMCHAIR MILLIONAIRE Teamed with personal-finance leader Intuit to offer advice and services

IBABY Bought E-commerce site to launch iVillage's retail strategy; offers 20,000 products

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of a road by having
travelled it
than by all the
conjectures and
descriptions
in the world.

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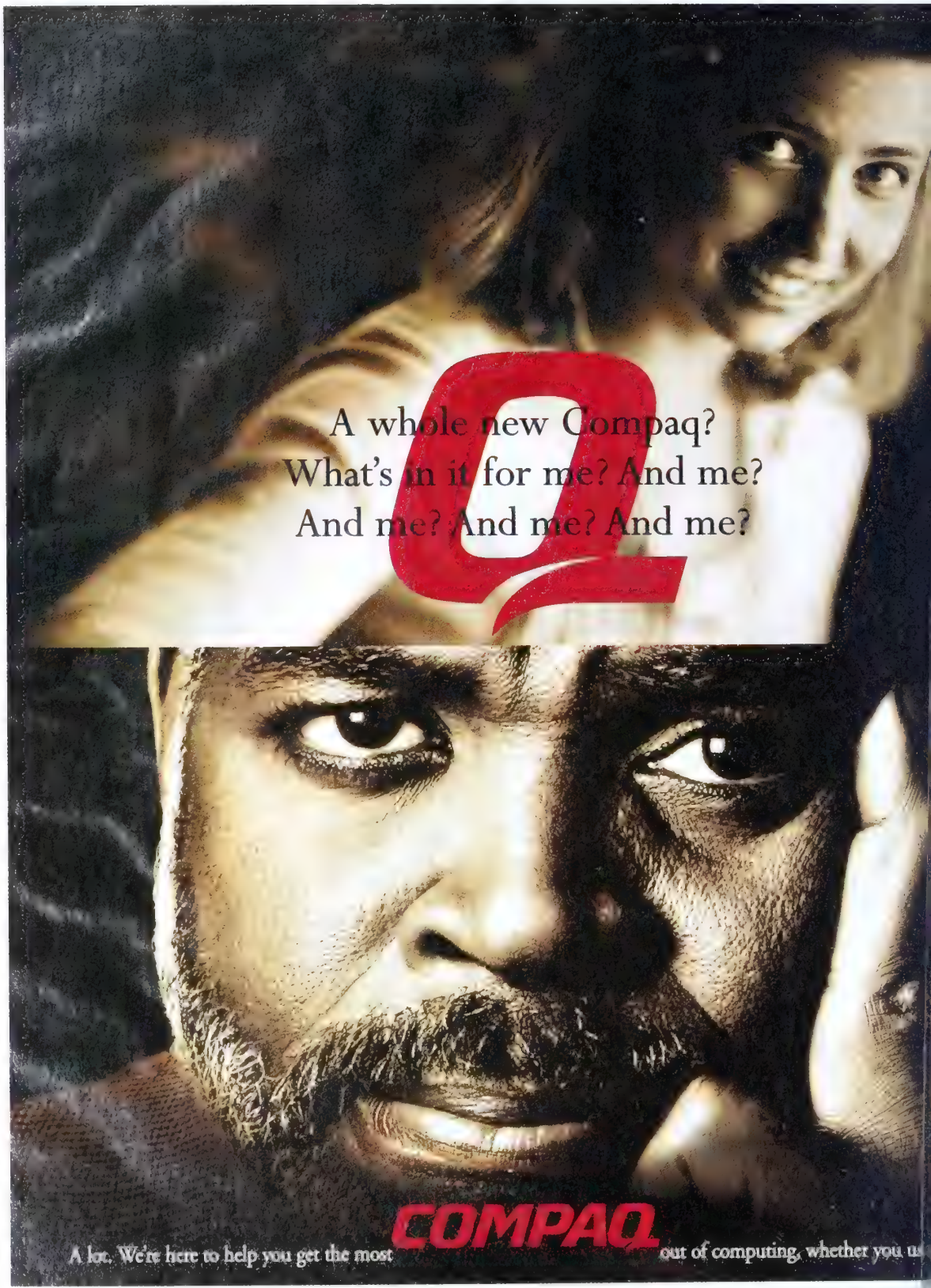

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TELEVISION

WILL THE NIELSEN SPIN-OFF BE A HIT?

It all depends on how well it handles new technologies

Any near-monopoly can expect a certain amount of bellyaching from its customers. And Nielsen Media Research Inc., which provides the television ratings on which the sale of $42 billion worth of advertisements each year is decided, is no exception. "The May sweeps were a disaster," gripes David F. Poltrack, senior vice-president for research and planning at CBS Corp. "The industry became aware just how bad a measurement service Nielsen was providing." For Nielsen, fending off such jabs has become even more critical since July 1, when it became a stand-alone public company for the first time in its 49-year history.

DIMLING: *Seeing Nielsen as master of its own destiny*

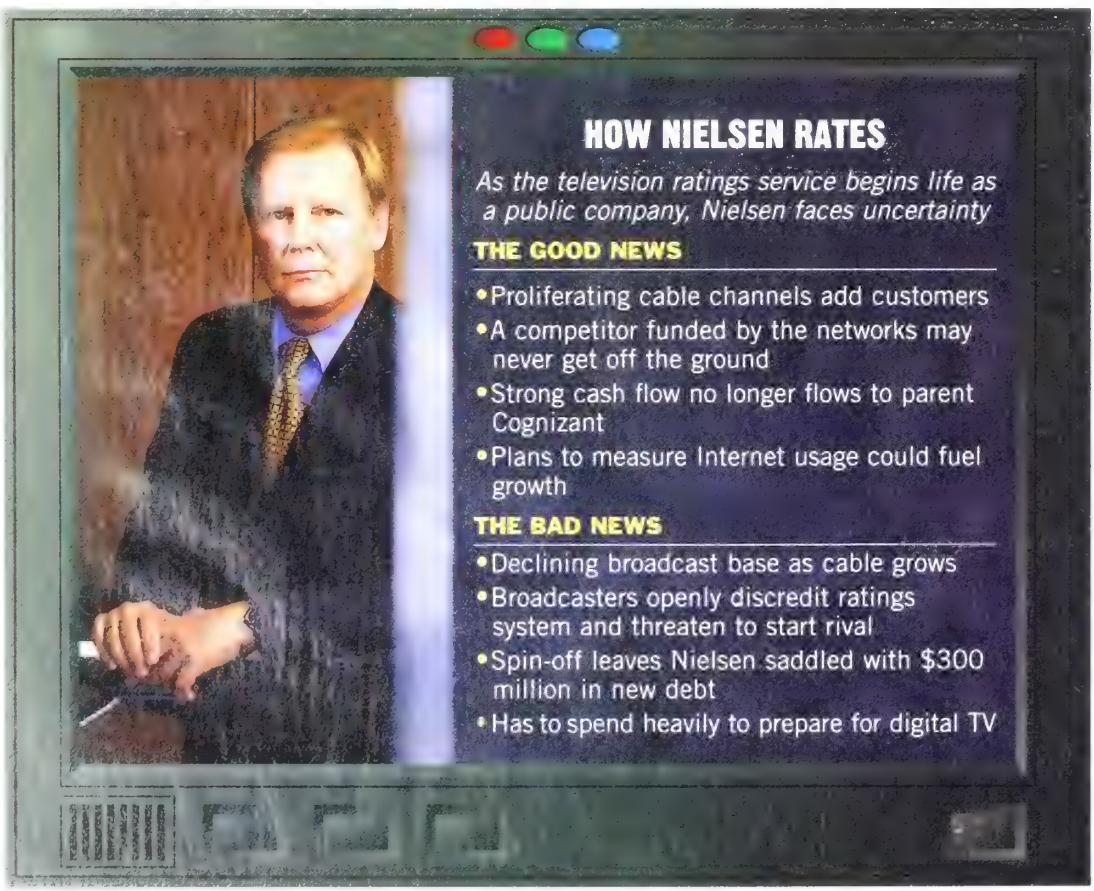
Nielsen finds itself flying solo at a time when it is enjoying hefty profits but also facing mounting challenges. Plans by several of its disgruntled customers to launch a competing service are gathering steam, and Nielsen is spending heavily to head them off and prepare for the launch of digital TV.

At the same time, newly anointed chief executive John A. Dimling, a 15-year Nielsen veteran, has found that independence comes with tight purse-strings. Nielsen's former parent, Cognizant Corp., was itself a spin-off from the old Dun & Bradstreet Corp., comprising Nielsen and health-care research firm IMS Health. But IMS, le Cognizant's former executive team, s off debt free with $640 million in c while Nielsen was awarded no cash $300 million in debt. "There are a l things going against them at the set," says analyst James D. Dough at Prudential Securities. At least Nie is now the master of its own des says Dimling, free to pursue new enues, such as measuring usage or Internet. "As PCs and TV converge think we really need to be there t able to measure both," he says.

Today, Nielsen's main business sists of two ratings operations. One national service built around elect "people meters" wired to TV sets in homes. The other, which measures v ership in 211 local markets, uses th chaic practice of recruiting couch pot during quarterly sweeps periods to s ble what they're watching in dia Customers have long bristled a Nielsen's shortcomings, from its me ology to its pricing. In the recent sweeps, for instance, response rates local diary samples were abysmally but Nielsen stood by its numbers.

"NO GUARANTEE." Now, digital te sion presents a whole new ratings lenge. Whereas current meters me only the chan TV is tuned to, tal TV can t mit several si through a s channel, and ext meters won't be to measure accu ly who is wat what. Nielsen spent almost million develop new digital r but even its regulatory f concede there guarantee" it w adopted.

Even as it gles to adapt dependence and nological ch Nielsen is a r spinner. It gen operating inco $21.3 million million in sales quarter ende 31. Getting g though, won't easily. Some come from w over more loc kets to its ele



ers and by signing on new cable nels. And Dimling has hopes for a ential kicker" from new Internet and al-TV gizmos. Nielsen and Microsoft ., for example, have teamed up to lop a ratings system that can mea- television viewing through PCs using lows 98. This year, Nielsen is also ing a service that will monitor home uter usage and market the results eryone from advertisers to software lopers.

igh-tech doesn't come cheap, how- . Although it will have to spend of its cash flow on servicing its y inherited debt, Nielsen is plan- to plow as much as $110 million be-

sgruntled customers are getting closer o launching a rival ratings service

n this year and 2000 into new com- r systems and the rollout of the al meter—double its outlay of the ious three years.

elsen has little choice but to spend. alition of 29 broadcasters, adver- , and agencies has been sponsoring million-plus pilot project of a new al metering system devised by Sta- al Research Inc., of Westfield, N.J. s currently soliciting letters of in- from broadcasters and if it gets a million commitment, plans to h a new national service within ears.

OOA? However, without cable gi- Turner Broadcasting System Inc. Viacom Inc.'s MTV Networks—no- abstainees from the SRI project— ances are considered dicey. Larry man, Turner Broadcasting's presi- of sales and marketing, isn't sure ill actually produce better research Nielsen. "We believe the Nielsen is fundamentally accurate," says man. But others, like Tim Brooks, r vice-president of research for USA orks, worry that without the t of SRI, Nielsen's service won't nue to improve.

blicly, Dimling plays down SRI's es and notes that Nielsen has out- l past rivals like Arbitron Co. But does he cope with his customers ing him and angling to launch a etitor? "We don't try to retaliate st them by producing lower rat- –tempting though that might be," ys slyly. Indeed, rating well may e best revenge.

By Richard Siklos in New York

100% NO LOAD

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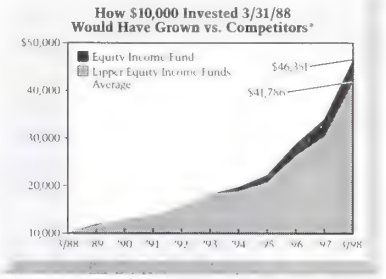
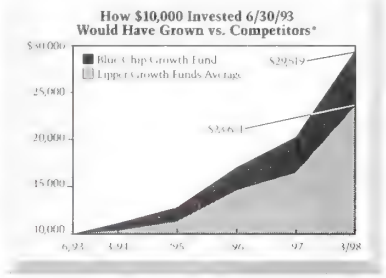


36.23%, 20.55%, and **16.58%** are Equity Income Fund's average annual returns for the 1-, 5-, and 10-year periods, respectively, as of 3/31/98. Chart shows cumulative total return from 3/31/88 to 3/31/98.



45.17%, 31.98%, and **25.59%** are Blue Chip Growth Fund's average annual returns for the 1-year, 3-year, and since inception periods, respectively, as of 3/31/98. Chart shows cumulative total return from the fund's inception on 6/30/93 to 3/31/98.

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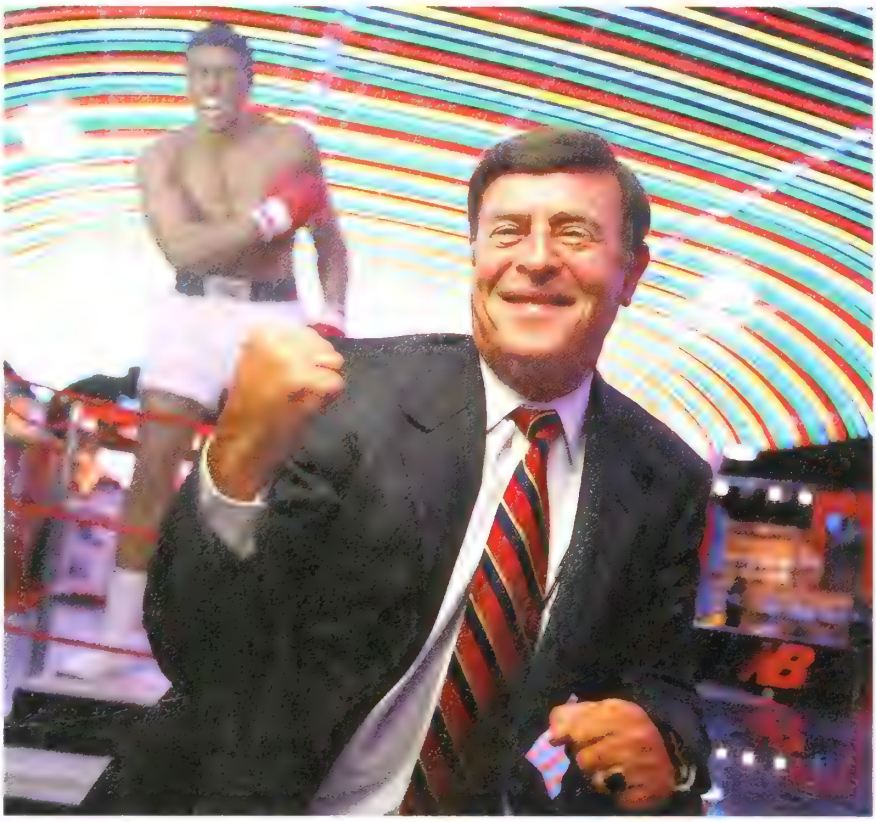


FAST FOOTWORK: *Ruttenberg doubl his share in sports shoes in two yea*

RETAILING

JUST FOR FEET IS MAKING TRACKS

Its "big-box" shoe stores have walked all over rivals

Anita Mollica is obsessed with tennis shoes. The mother of two used to spend days scouring stores in Birmingham, Ala., for the perfect pair until she discovered Just For Feet Inc. On a recent visit, Mollica browsed the toddler section for her 2-year-old. Nearby, while rock music blared, a boy practiced his jump shot on the store's half court. "The selection is great, and the kids have a ball," says Mollica.

That's music to the ears of Harold Ruttenberg, Just For Feet's CEO. From a single store 10 years ago, Ruttenberg has built the fastest-growing athletic-shoe retailer, averaging 104% annual growth since 1994. His "big-box" stores stock 4,000-odd styles—10 times as many as most rivals. Combining choice, service, and entertaining promotions, Ruttenberg has doubled his share of the $12.4 billion U.S. athletic-shoe market in the past two years, to 4%, according to analyst Marcia L. Aaron of BT Alex. Brown Inc.

As industry giants such as Ventacor's Foot Locker struggle with management problems and outdated merchandise, Just For Feet has bucked a four-year, 23% decline in industry sales to hit a record $479 million in revenue in 1997. "They've revolutionized this industry," says Renny Smith, managing director of Thomas H. Lee Co. Smith's buyout firm recently sold its Sneaker Stadium chain to Ruttenberg and now holds million shares of Just For Feet. Aa expects the 293-store chain to earn $5 million this year, up from $34.3 millio 1997. She thinks sales will jump 43% 1998, to $682.5 million.

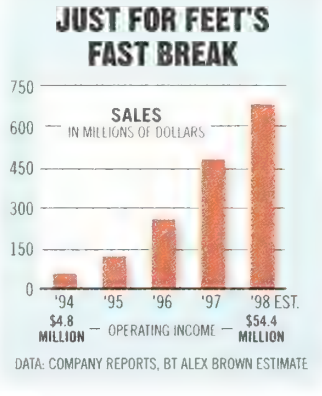
The stock has not had as smoot climb. A move last year into sma stores worried Wall Street and co bined with industrywide weakness depress the shares from 31 in Janu 1997, to 12½ last August. A change accounting on store-opening expense from an aggressive 12-month write period to a more conservative prac of taking all charges at the time of opening—forced the company to res earnings. That didn't help the st either. Steady results since have a the shares' climb back to a recent 2

BOOTING UP. Just For Feet's advant is its speed in recognizing shifts in t In 1996, when shoemakers offere daunting number of styles linked to Olympics, Just For Feet stocked widest selection. The next year, w hiking boots hit big, most sneaker ch lost out. But Just For Feet had to stock up its existing boot selecti

A typical Just For Feet stor 15,000 to 25,000 sq. ft. Mall-based vals such as Foot Locker and Foota USA Inc. average 4,000 to 6,000. size lets Just For Feet buy in bulk negotiate discounts, Ruttenberg s of 15% to 20%. That is passed c customers in each store's Combat Z where discounts can reach 70%.

To humanize his big spaces, the has designed stores-within-a-sto booths filled exclusively with one a er's apparel and footwear. At the Vegas store, goods from Nike Inc housed beneath a video wall broad ing the brand's commercials. Elsew Timberland boots climb a mock w fall. "In-store pre like that is just a portant an asset as an athlete end ment," says Bil Sweeney, senior v president and ge manager of Reebo ternational Ltd.'s America division.

Ruttenberg d stop with selectio spends hundred thousands of dol year training his Managers must g



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on page 124

The Corporation

ate from Just For Feet University, three-week program that includes ever thing from foot anatomy to setting u store displays. A $750,000 two-wa satellite system lets manufacturers su as New Balance Athletic Shoe In beam training tutorials to Just For Fe salespeople. New Balance, which offe an average of four different widths p sneaker—compared with one at Ni Inc.—says training was a big factor boosting the brand, No. 6 nationally, the No. 3 seller at Just For Feet.

Selection and training have helpe the chain outpace the competition. A cording to analyst David G. Magee Robinson-Humphrey Co., an Atlanta vestment bank, Just For Feet sto sales average $650 per sq. ft., more th twice the $250 that mall stores av age. But there have been challenges sharp growth in inventory was a pr lem until Just For Feet installed in mation systems to help bring the st level down. It fell 22%, from $152 sq. ft. in 1996 to $119 in 1997.

"A MIRACLE." Ruttenberg says he wo by trial and error. Plenty of ideas h vanished like out-of-style sneakers. G are the in-store nursery ("Too busy it," says Ruttenberg) and a $100,000 ve-through window. "Things weren't planned in the beginning," he s "When I look back on it, it was just p luck and a miracle that it worked."

A South African native who star by selling Levi's jeans out of his Ruttenberg came to the U. S. in 197 the age of 34 with only $30,000. opened a sportswear store in a m few years later, but after five y couldn't afford the rent. That's whe built a 10,000-sq.-ft. store right out the mall stocked only with his best- er: athletic shoes.

After a decade following this succe model, Ruttenberg is heading bac the mall. In 1997, he bought two re al chains, adding 86 smaller stores. C Athletic Attic, these stores mai many of Ruttenberg's big-box traits cluding a smart staff, the store-with- store pattern, and a generous sto 1,500 styles. Located in strip malls, are meant to open up regional ma but avoid intra-mall competition.

Analysts expect the mall-b stores, starting from a small bas grow twice as fast as big boxes year. "I get accused all the time ing too risky," says Ruttenberg, you have to take risks in this bus in order to succeed." So far, the are paying a nice premium.

By Nicole H in Birmingham A

COMMENTARY

By Brad Wolverton

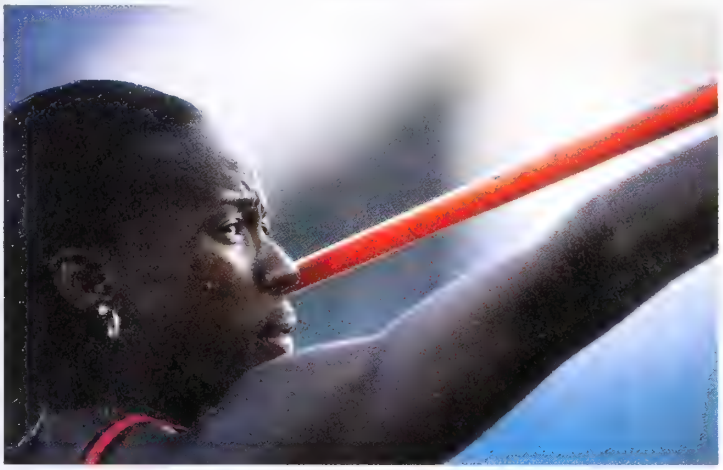
GOODWILL DOESN'T MAKE FOR GOOD GAMES

orld Series and America's Cup trophies—two of the highest honors in sports—adorn Ted rner's 14th-floor office atop CNN nter in Atlanta. But the sporting ent that matters most to him—the odwill Games, which he created in 86—is far from the winner's circle. fact, this fourth installment of the mes, opening on July 19 in New rk, will pile at least $25 million to the $109 million losses they have cked up since they re started.

The games were es- olished to promote l-good relations be- een the U.S. and So- t Union during the d war. And Turner's ople always bragged at they didn't care out the losses: They re making the world e for democracy. But ce the collapse of mmunism, the Good- l Games have strug- d for an identity in a urated sports mar- . Now, the games must prove ir mettle under the scrutiny of w parent Time Warner Inc. Unfortunately, this version of the odwill Games will be a mere re- nal event in a poorly chosen lo- e. New York might be the world's gest media market, but it's home a notoriously tough crowd: Of the),000 tickets available this sum- r, just 180,000 had been sold with y two weeks left before the open- festivities.

MN YANKEES. Games officials antic- te heavy walk-up sales in re- nse to a late advertising blitz oing the 15-day event in which ltestants compete for prize mon- —a total of $5 million—in popular mpic sports such as figure skat- , track and field, swimming, and nnastics. However, the athletes l also be competing against the netown Yankees, who own the t record in baseball this season, l the surprisingly strong Mets. l send my clients to the theater first," sniffs Martin E. Blackman, a sports-marketing consultant who advised Miller Brewing Co. to pass on the games.

At least you can read the reviews before going to the theater. Sponsors never know what they're getting with the Goodwill Games. In St. Petersburg, Russia, in 1994, the first few days of the swimming competition had to be canceled because the pool water was green. And only one day before the ice skating competition was scheduled to begin, the rink had no ice. After those games, which lost $40 million, just 4 of 14 corporations renewed their sponsorships. This year, big-name sponsors include Sony, Gillette, Anheuser-Busch, and Johnson & Johnson.



NO POINT? *Jackie Joyner-Kersee will compete in the games*

To keep the sponsors happy, executives at Time Warner believe that they have come up with a remedy for all the snafus: Cut fat and micromanage everything. The result: Instead of 25 competitions with 3,000 athletes, there will be 15 television-friendly sports with only 1,500 athletes. A clever new finals-only format will highlight the three prime-time hours of coverage nightly on TBS.

And Time Warner has run some 13,000 TV advertising spots, many of which promote the Goodwill Games' new mission. What is that mission? Well, that's where things get a little fuzzy. What is essentially TV programming for Turner is being sold as charitable entertainment. "People aren't going to go out and just watch raw sports," says Goodwill Games President Michael P. Plant. "You've got to entertain them and give them a cause to come out for."

NEW BOUNCE. So Time Warner's music business has lined up Brandy, Ray Charles, and Hootie & the Blowfish to play at the opening ceremonies. Halftime shows will feature bungee jumpers and skydivers. And 1% of the $200 million cost to stage the games will be donated to the Boys' & Girls' Clubs of America and UNICEF. "It hasn't worked out as the mini-Olympics Turner wanted, so now we're seeing Ted's giant cocktail party," says David M. Carter, a University of Southern California sports-business professor.

That might be a little harsh, but it's true that clicker-crazed TV sports fans could care less about noble sentiments. They demand rivalries and upsets—Donovan Bailey pushing Michael Johnson to another world record in the 100—and all in a context that means something. Without the nationalistic fervor and traditions of the Olympics, the Goodwill Games are little more than a sports exhibition. And for a top-shelf sportsman like Ted Turner, they just don't fit the trophy case.

Wolverton writes about sports from Atlanta.

TED'S FOLLY

YEAR	HOST CITY	LOSSES
1986	MOSCOW	$26 MILLION
1990	SEATTLE	$44 MILLION
1994	ST. PETERSBURG	$39 MILLION
1998	NEW YORK	$25 MILLION*

*Projected DATA: GOODWILL GAMES

HOW TO RETIRE

Strategies for retiring LATER, *investing* SMARTER *and living a more* ACTIVE *lifestyle*

Retirement isn't what it used to be. For decades, working people aspired to put in their time on the job, then head off to a life of leisure. That's changing—and in a big way. Americans are living longer and staying healthier. As a result, during the past five years, they have stretched their working lives—after decades of earlier and earlier retirement.

With 77 million baby boomers approaching their golden years, this is only the start. A new BUSINESS WEEK/Harris Poll shows that 75% of relatively well-to-do baby boomers expect to keep working after they retire from their current careers (page 88). That decision requires new planning. In our 1998 Guide to Retirement, we give you strategies you'll need.

A new approach to financial planni crucial. In the past, you've been told as approach age 65 to skew your asset mix from stocks and toward bonds and other, conservative, investments. But now, th an excellent chance you'll live at least 20 past the traditional retirement age, so can take more risk to beat inflation and comfortably (page 76).

If you would rather not figure out the er asset-allocation mix yourself, a new ty time-targeted mutual fund can do it for You pick a portfolio that corresponds to projected retirement year, and as the approaches, the investment mix become risky (page 86). To quell the fear of out your savings, you can turn to several in

ILLUSTRATIONS BY STUART BRIERS

RETIREMENT GUIDE

PERSONAL FINANCE

Asset Allocation, *Page 76*
Yesterday's tried-and-true formulas no longer apply

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Jimmy Carter, model retiree

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Additional online material can be found at www.businessweek.com.

cing strategies (page 80). They could be ally useful if the stock market cools off tiring boomers start cashing in their a few years down the road (page 92). ere's more to retirement than tending nest egg. You may want to stay em- l—not just out of necessity, but because njoy holding a job, want to combat bore- or have a yen for a second career (page To augment your professional life or sat- longtime yearning, perhaps you'd like to college or get a PhD (page 106). In ad- to pursuing a second career, you might to use your life skills helping others as a eer in a school for troubled teens or for indigent patients (page 110). For- President Jimmy Carter has found ful- it in volunteerism around the world— ook a little time off to explain what it to him (page 112).

active retirement can mean travel. But the tour bus. A number of travel com- sponsor trips to exotic locales that to seniors with a penchant for adventure (page 102). And one of the big decisions is whether to move to a new place. A condo on the golf course may not be the ticket. How about keeping busy in a bustling college town (page 98)? Of course, you'll have to stay in shape. That's where joining a sports team or club of like-minded athletes can make staying healthy fun (page 104).

Even if fitness is your goal, you still may need a little help from technology as your eyesight or dexterity wanes. Fortunately, devices such as programmable hearing aids and software that turns computer print into speech can make life easier (page 96). And don't forget that more and more online resources are becoming available (page 94).

There's no question that retirement can open up a new and satisfying world. "Many people are no longer willing to walk out the office door and just play golf," says Stephen P. Barnes, head of Barnes Investment Advisory in Phoenix. An active retirement can really become the best years of your life.

By Toddi Gutner in New York

ASSET ALLOCATION

The New Math Of Retirement

"Retirement is very different than it was even 15 years ago. It is becoming a transition state, not an end to itself."
— Ross Levin, president of Accredited Investors Inc., an Edina (Minn.) financial consultant

Many tried-and-true formulas may not apply when you live –and work–longer

Whether your retirement goal is money or fulfillment, surveys suggest that most baby boomers now want to work during their golden years. This transformation of retirement from kick-back-at-60 to a more active period of life can give you a new degree of flexibility in planning your financial future.

Working longer can allow your retirement portfolio to expand by compounding for a greater per of time. Starting a second career, shift to part-time work, or joining the staff nonprofit organization can also let you t more investment risks—and potenti get greater returns—as long as you c tinue to earn a current income. But passing of the classic retirement patter making long-term savings and investm planning a lot more challenging.

If you're planning a partial or late retirement, what's right asset mix for you? It may not be the tried-and-true mula your broker, accountant, or financial planner dishes "People should not put too much faith in the standard rule thumb when it comes to asset allocation," says Henry T

anking and finance law professor at the University of Law School in Austin. "You need to think, 'How does a f investments fit into my particular situation?'"

eed, many common investment guidelines are misleadthe new world of retirement. For example, one maxim o subtract your age from 100 to figure out the right ntage of equities in your retirement portfolio. If you're at would mean 45% equity 5% fixed income. But that e rule takes only your age ccount. It doesn't include willingness to weather s in the market, let alone er you currently enjoy job ty, are about to go through hird corporate downsizing, n to continue working well our 70s.

how about the common n of putting most of your r into fixed-income securit retirement? Sure, that ive you more current into live on, but you may be hanging yourself. "With life ancy increasing, equities lay a bigger role in retireto protect you against in- and to provide asset ," says Michael T. Daley, a vice-president at CIGNA

STICATED AIDS. These ons shouldn't leave you in r. Despite the hours people picking mutual funds and ig out the market's every twist, economic research its that asset allocation will be the main determinant of ortfolio's long-term performance. Fortunately, the task ating an optimal asset allocation for yourself has been easier with sophisticated computer software and Web table). And many companies are offering employees a eneration of retirement financial planning models as part r benefits packages.

give you a head start, we turned to Financial es Inc., a Palo Alto advisory firm found- William F. Sharpe, Stanford University nist and Nobel laureage 78). Using commathematical models, ial Engines has presome asset allocation gies that estimate ostponing retirement lopting more aggresavings and investtechniques could fatrour portfolio—and the risks are of do-

can't get rid of some ainties. Who knows such things as investreturns and tax and n rates will be when tart drawing down avings? "There's a risk you won't reach your goal, no matter how good a saver you are," says Robert J. Garner, national director of Ernst & Young's personal finance consulting practice. But it's crucial to try to bullet-proof your portfolio as much as possible. "As long as you develop a reasonable understanding of the trade-off between risk and return," says Sharpe, "you'll probably do O. K."

One thing you'll see immediately from running various asset allocation scenarios is how staying active longer can make a big difference to your savings. Let's take a median U. S. household in its 50s—call them the Smiths. After accounting for their debts, they have accumulated a net wealth of $325,000, including pensions, Social Security, and housing. Economists James Moore and Olivia S. Mitchell of the Wharton School estimate the Smiths will have $380,000 by the time they hit 62. To maintain pre-retirement consumption levels if they retire at 62, the Smiths will need to start saving an additional 16% of their annual earnings right now. By delaying retirement three years to age 65, however, the Smiths' nest egg will swell to $420,000 and the required additional savings will drop to 7% of their annual income.

Now let's take another example: a risk-averse 50-year-old earning $100,000 a year who we'll call Jim. He is putting 10% of his salary into a 401(k) plan, currently worth $600,000. Financial Engines estimates that if he puts two-thirds of his money into bonds and one-third into equities, he'll have only a 34% chance of reaching his retirement goal: an annual income of $80,000 a year, figuring retirement at 65. If Jim waits until he's 70 to retire, however, he'll have a 75% probability of hitting that $80,000 goal. Jim could further stack the odds in his favor by saving more every year or by putting some money into risker—but potentially more remunerative—investments, such

Asset Allocation Helpers

PRODUCT/WEB SITE	DESCRIPTION
FINANCIAL ENGINES www.financialengines.com	Asset allocation information
MORNINGSTAR www.morningstar.net	Let's you fine-tune a portfolio
PROSPER www.ey.com	Ernst & Young's personal finance software
QUICKEN FINANCIAL PLANNER www.quicken.com	Extensive planning software
RETIRE SECURE www.pwcglobal.com	Price Waterhouse Cooper's retirement aid
S&P PERSONAL WEALTH www.personalwealth.com	Standard & Poor's asset allocation model
SMARTCALCS www.smartcalc.com	All the basics are covered
T. ROWE PRICE www.troweprice.com	Good, simple "what if" program
VANGUARD www.vanguard.com	Solid online retirement planning

Retire Later and Reap the Rewards

You're 50, earn $100,000 a year, and have $600,000 in your 401(k). You want to retire at 65 with a retirement income of $80,000 annually, adjusted for inflation but excluding Social Security. If you invest conservatively, what is the chance you'll reach your goal? And how much of a difference would it make if you invested more aggressively, boosted your savings rate, or postponed retirement to 70?

SAVINGS RATE/ ASSET MIX	CHANCE OF MEETING YOUR GOAL • RISK LEVEL* RETIRE AT 65	RETIRE AT 70
Save 10% of salary in 401(k) Invest 63% in high-quality bond fund, 37% in equity-income fund	34% • 9%	75% • 9%
Save 10% of salary in 401(k) Invest 37% in high-quality bond fund, 63% in equity-income fund	51% • 12%	80% • 12%
Save 30% of salary in 401(k) and other plans Invest 50% in equity-income fund, 50% in small-cap growth fund	82% • 20%	97% • 10%

*There is an estimated 1 in 20 chance of your losing at least this much of your retirement assets in the next 12 months if markets perform poorly.

DATA FINANCIAL ENGINES INC

as growth stocks and international equities.

Indeed, the essence of asset allocation is the balance between risk and expected return. For example, from 1970 to 1997, 30-day Treasury bills—the classic risk-free investment—returned an average of 6.8% annually. But the value of T-bills fluctuated, on average, by only 2.7% a year. By contrast, stocks have offered the highest potential returns, but also greater risks. Over the 27-year period, the Standard & Poor's 500-stock index had an average annual return of 13%, with its value swinging up and down an average of 16%. But after 16 years of a bull market and recent returns closer to 20% or 30%, "people seem to be making the assumption that stocks aren't that risky anymore," says Mark Motzel, manager of asset allocation at American Express. Stanley E. Hargrave, principal owner of IMS/CPAs & Associates in Riverside, Calif., puts it another way: "Someday, these high rates of return have got to come down."

That's why it pays to heed the age-old mantra of spreading your assets among equities, bonds, and other assets to diversify risk. And recalibrate your asset allocation as time passes and your needs or risk tolerance change. "Most people haven't looked at their allocation at all," says Martin L. Leibowitz, chief investment officer of Teachers Insurance & Annuity Assn.-College Retirement Equities Fund. "They've let it drift with the markets."

DANGEROUS MISTAKE. Another mistake you may be making is not "looking at your portfolio as a whole," notes Meir Statman, a finance professor at California's Santa Clara University. You may have segregated your assets by purpose—retirement, college, and so forth. "This kind of 'mental accounting' is dangerous to your financial health," warns Sharpe. Why? Let's say you've saved $100,000 in your college account. Your child is going off to college in five years, and you have divvied up the portfolio into 20% equity and 80% fixed income. You also have $100,000 in a retirement account, split into 75% equities and 25% bonds. While the allocation in each account sounds about right, your overall asset mix is 52% fixed income and 48% equity. That may be too conservative. You might be better off with a 60-40 mix of stocks and bonds, so "any short-term shortfalls can be offset with long-term gains," says Jeffrey Schwartz, principal at Ibbotson Associates in Chicago.

To get the most from your investments, focus on understanding your risks and time horizon, and then decide how much to put into stocks, bonds, cash, and so forth. Use computer or Web programs to play with "what if" scenarios as you come up with the right asset mix, or interview several financial advisers if you're not up to the task of allocating assets on your own. Then, parcel out your assets into taxable and tax-deferred accounts. For example, you wouldn't want to put tax-exempt municipal bonds into a tax-sheltered IRA. The IRA would be a more proper home for an equity-income fund whose dends you want to shelter from taxes. A Roth IRA, permits tax-free withdrawals if you're at least 59½ and held your account for at least five years, is especially attra

Investment doesn't just mean long-term savings. I New Economy, human capital—brains, skill, and energy—creasingly valuable. The returns of education show up in er wages and greater job security, so learning new skill keeping current with advances in your profession is an way of reducing risk through diversification. "There is gument for thinking of human capital, and not just stock bonds, as an asset class," says Massachusetts Institute of nology economist Andrew Lo.

However you view asset classes, you need to develop location plan before you retire. Planning during your p tirement years and following smart money-management ciples will give you greater odds of having a comfo income when you finally decide to relax.

By Christopher Farrell in St. Paul,

WILLIAM F. SHARPE • *Stanford University*

The Godfather of Index Funds

As a grad student at the University of California at Los Angeles in the late 1950s, William F. Sharpe was among a group of intellectuals whose theoretical insights became the basis for modern portfolio theory, derivatives, and equity-index funds. For his work in changing finance, Sharpe in 1990 shared the Nobel prize in economics with Harry M. Markowitz and Merton H. Miller. Now 64, Sharpe is still going strong.

At an age when many profs are spending more time on the tennis court than in the classroom, Sharpe teaches at Stanfo University and is producing a textbook, *Macro-Investment Analysis*, on his Web site (www sharpe.stanford.edu). The Bosto native is also the force behind Financial Engines Inc., a Net-based company offering individu als easy-to-use, but sophisticate asset allocation.

BUY AND HOLD. Sharpe's best-known contribution to finance is the capital asset pricing model. Sharpe showed that every equi investor faces two different risk being exposed to the entire sto market and to the unique fortunes of a particular company. You can't protect yourself agai the former, he maintained, but can do something about the latter by diversifying a portfolio among numerous holdings. One implication: The optimal stock market investment strategy is buy and hold broadly diversifie baskets of stocks, such as inde funds.

While he does invest through some money managers, "most o my investments are in equity-in dex funds," Sharpe says, citing how hard it is to beat the mark consistently, after adjusting for risk. In light of the market's sp tacular performance, Sharpe do see an increased likelihood it w decline. But what really concer him is that individuals aren't ta ing into account the risks of in- vesting in stocks. Diversificatio can help moderate those risks, and if anyone understands that it's Sharpe.

By Christopher Far

From publishing to financial services to media, we help millions of people work smarter. And with over 100 brands and companies, such as Standard & Poor's and Business Week, *we give you the resources to make sure the job is done right. No matter where you do it.*

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INCOME STRATEGIES

Making the Money Last —And Then Some

There are numerous ways to ensure that your income stream keeps flowing

What's one of the biggest concerns among retirees? It's having too little money to live on. Even if your income is adequate when you first retire, you may live so long that you'll burn up your savings. This fear of insolvency will only intensify as life expectancies increase, Social Security becomes more tenuous, and—for those still contemplating retirement—employer-guaranteed pensions are replaced by 401(k) savings plans whose size depends largely on individuals' investment skills. What's alleviating some of the concern is that more people are planning to work longer. But even that extra income may not be enough. That's where products and strategies to augment sources of retirement income may help. True, boosting your current income may mean leaving less to your heirs. But the trade-off is peace of mind—and a more comfortable lifestyle, perhaps—for yourself.

Among products you can buy is an annuity. This is an insurance company contract that, start at age 59½ or later, gives you a st payment stream for a specified perio for your life. You also might want to out a reverse mortgage. This lets you row against your home's value but pone repayment until you move or Strategies for a consistent income flo clude buying bonds with staggered m rities or stocks with differing dividend dates.

Before you consider any of these options, look at yo nancial picture and create a plan. If you've done mo your saving and are approaching the collection of proc you must determine your cash flow needs. Ask yourself your fixed costs are and how much money you need to annually. Next, calculate how much you can withdraw year from your retirement portfolio. Remember that at you must take out a certain amount each year from 401(k) and individual retirement accounts.

Using actuarial tables that estimate your life expec

A *Rare* COMBINATION

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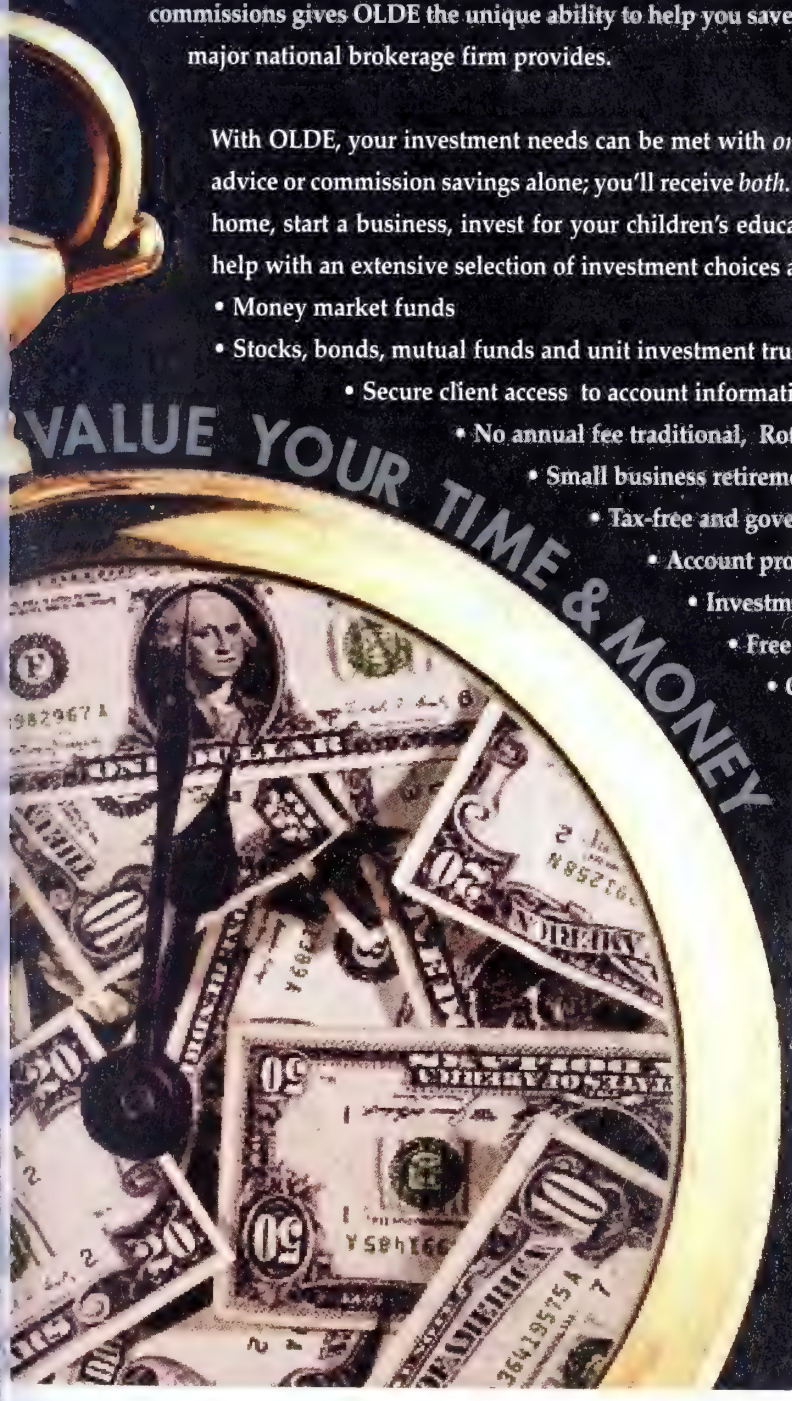
- Investment research
- Free account transfer service
- Offices nationwide



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and some assumptions about returns, you can roughly determine how long your retirement savings will last. T. Rowe Price Retirement Planning software ($19.95) can help you do this. Considering inflation and stock and bond market fluctuations, you should be conservative. Farrell J. Dolan, senior vice-president at Fidelity Investments, figures that on a portfolio returning 3% above inflation, you can withdraw 4% to 6% annually while you're in your 60s, 5% to 7% in your 70s, and 6% to 8% in your 80s.

With those figures, you can approximate whether your annual income will cover your expenses. If there's a shortfall, you need to act now. A first step might be to consider an annuity. There are two types. The tax-deferred kind allows your money to grow while you put off paying taxes until withdrawal, either in a lump sum or over time. Immediate annuities invest a chunk of money you've already saved and provide you with a payment stream. Both types can be variable or fixed. Variable annuities are invested in mutual funds; their payouts depend on market performance. Fixed annuities pay a set amount regardless of market changes.

Despite the allure of steady income, 99% of annuity holders withdraw their money in a lump sum or when they need cash, according to Eric Sondergeld, a senior analyst at the Life Insurance Marketing & Research Assn. To encourage people to opt for regular payments instead of lump sums, the industry is creating more flexible plans.

COMPLEX. For example, several companies such as Keyport Life Insurance (877 539-7678) and Aetna (800 238-6254) allow holders to exchange regular income checks for cash that liquidates the contract. Companies are also allowing for withdrawals while continuing to pay income. In return for greater liquidity, clients may face smaller payments and penalties for early withdrawals.

Industry experts expect more people to choose income streams, since an annuity is still the only product that can generate them for a lifetime. The new immediate variable annuity is popular with those who want to avoid the complex minimum withdrawal requirements of IRAs and 401(k)s. So they're rolling over retirement accounts, tax-free, into immediate annuities. That's what Robert Barnes, a 76-year-old retired engineer from Wayland, Mass., did when he invested his $300,000 IRA in a Fidelity immediate variable annuity. He—or his heirs—will receive about $6,500 a quarter for at least the next 16 years. If he lives longer than 16 years, he'll still receive the quarterly payments, although his heirs will then be entitled to nothing. Because the annuity's principal can continue to grow tax-deferred, "I get all the tax advantages of an IRA," Barnes says. "But I don't have to monitor the account and the withdrawals as closely, and I get guaranteed income for

Retired engineer Charles Voelker, 72, of Palm De Calif., didn't opt for lifetime income. Instead, he inve $130,000 of his $200,000 portfolio in two 10-year Key immediate variable annuities, giving him $1,950 monthly. dies before the decade is up, his heirs will receive what's If he outlives the contracts, he'll get nothing extra.

For all the attractiveness of a guaranteed monthly c annuities have several weaknesses. They have high fee money management and insurance expenses, plus penaltie early withdrawals. Annuity holders also pay income-tax of up to 39.6% on any capital gains, while mutual-fund ho pay only a 20% capital-gains rate. In fact, some critics you'd be better off making regular withdrawals from mutual funds instead of ing annuities. But "syste ic withdrawals from m funds are a logistical n mare and don't provid guaranteed life income," tions Eric A. Solis, a fin planner in Indian Wells,

You also should plan vesting only up to 15 your savings in an an "Just as you diversify portfolio for saving, should do the same you're taking income," ommends Steve E. No a vice-president wit Rowe Price Associates

If most of your cash i up in your home, you ce ly wouldn't sell it to fu immediate annuity. But ing a reverse mortgage can tap the equity for i and not become hom "This vehicle unlocks i home equity and conve into cash," says H Turkel, senior vice-pres at GMAC Mortgage in sham, Pa. (888 737-4622 money, paid out as a sum, in monthly installm or set up as a line of c can be used for medica ongoing expenses, or an else. Because you're receiving loan proceeds, you pay n es on the cash. The amount you or your heirs owe is eq what you received plus accumulated interest. But you'l er owe more than your home's value.

A reverse mortgage was a huge help to Betty Tayl who had a cash crunch after her husband died in 1990. her Social Security check slashed from $1,200 to $ month, she barely had enough to cover her fixed m costs of $500 plus a few extras. So at her son's sugge Taylor went to the Denver office of Wendover Financia vices Corp. (800 843-0480) and borrowed $40,000 again value of her $90,000 town house in Golden, Colo. Taylo some of the proceeds to pay off the $19,000 balance original mortgage. That left a $21,000 line of credit to she needs. So far, she has tapped it to replace her furna has made a world of difference in my life," she says.

To qualify, you must be at least 62 and live in

How To Keep Your Income Flowing

A number of income-generating financial products and strategies can help alleviate your fears of outliving your retirement savings.

PRODUCTS

REVERSE MORTGAGES Loans that let you borrow up to 75% of your equity in your home, if you're 62 or older, subject to certain limits. You can receive a lump sum, regular payments, or a line of credit. The loan is repaid after you move or die.

SHARED APPRECIATION MORTGAGES Loans that give you a cash payment of up to 25% of your equity. The loan is paid when you move or die. The lender gets first dibs on any future appreciation in your home.

ANNUITIES Insurance company contracts that guarantee you an income for any period of time you choose, starting from age 59½.

STRATEGIES

BOND LADDERING You buy a portfolio of bonds whose maturities are staggered and that have different interest payment dates. The former protects you against interest rate risk, while the latter creates a regular income stream.

STOCK DIVIDEND LADDERING You invest in high-yielding stocks with regular dividends but different payment dates. That lets you generate a steady income flow.

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home. You can expect to receive 30% to 75% of your property value. But some of the proceeds will have to be used to pay off any existing mortgage. The older you are, the more you can borrow against your home's value. On a $250,000 house, a 62-year-old borrower can get a maximum credit line of $70,280, or $452 a month, with a Federal Housing Authority Home Equity Conversion Mortgage (HECM) loan, according to GMAC Mortgage Corp. Because the estimated term of the loan is shorter, that amount increases to $106,737, or $840 a month, at age 80.

You can get a reverse mortgage from a lender affiliated with one of three organizations. Fannie Mae (FNMA) HomeKeeper and HECM are federal programs with maximum loan limits of $227,150 and $170,362, respectively. Irvine (Calif.)-based Financial Freedom Senior Funding Corp. (800 500-5150) makes reverse mortgages up to $750,000, but its program is not as widely distributed as the others and it only provides lump sum payments. "Try to go to a lender that offers more than one program, because the loan amount can vary a lot for the same person," says Patrick J. McEnerney, president of BNY Mortgage Co. (800 677-9000).

RENT A ROOM. Critics of reverse mortgages say they're too expensive, with closing costs running from $5,000 to $7,000. HECM loans also carry annual mortgage servicing fees of $360 and require insurance, says Leon Harper, housing specialist at the American Association of Retired Persons. And interest rates can be up to two percentage points above conventional 30-year home loans.

Because it's so costly, a reverse mortgage makes sense only if you expect to remain in your home for at least five years. Reverse mortgages are complicated, so you should ob loan counseling before you take one out. The HECM proces fact, requires counseling, and FNMA makes it available. counselor should help you consider alternative solutions, s as renting out a room in your home or local assistance grams, says Ken Scholen, director of the National Center Home Equity Conversion.

In the next six to eight months, another mortgage pro that can help generate income will l ly make its debut in the U.S. Alre marketed in England, the "shared preciation mortgage" is being develo by SBC Warburg Dillon Reed, an inv ment bank, for sale to lenders in U.S. If you own your home debt-f you'll be able to receive up to 25 the value in exchange for giving up of any future appreciation.

Say your home is worth $100,000. can get up to $25,000 now, without rent obligations. Then your home's v appreciates to $125,000. If you mov die, you or your estate would pay lender $18,750, or 75% of the $25 appreciation, plus the $25,000 principal. If your home's v doesn't rise, all you or your heirs will owe is $25,000.

If your problem is one of ample assets but not enc ready income, bond and stock dividend "laddering" strate may be the answer. To ladder a bond portfolio, you buy ries of bonds whose maturities are staggered, say for three, five, and eight years. Because the bonds have var interest payment dates, income is generated throughout year. Moreover, you'll always have bonds maturing at di ent times, protecting you against rising rates and giving flexibility to reinvest your capital as the bonds mature.

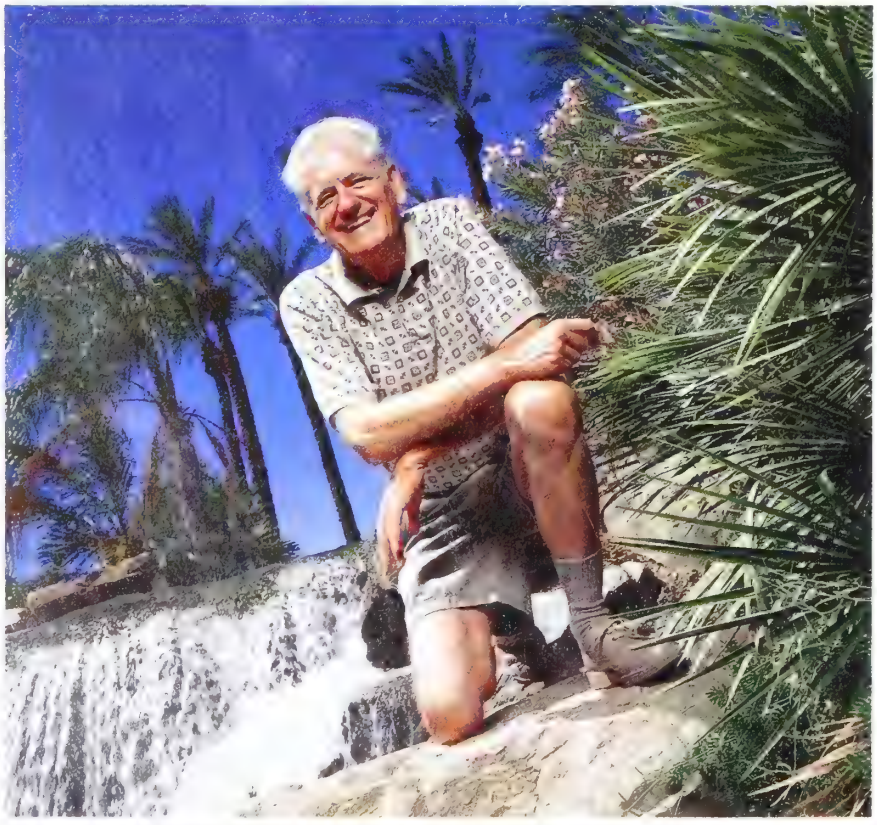
Reverse Mortgage Resources

AARP HOME EQUITY CONVERSION CENTER
202 434-6042 www.aarp.org

FANNIE MAE
800 732-6643 www.fanniemae.com

NATIONAL CENTER FOR HOME EQUITY CONVERSION
612 953-4474 www.reverse.org

NATIONAL REVERSE MORTGAGE LENDERS ASSN.
202 939-1760 www.reversemortgage.org



Charles Voelker chose to forgo lifetime income in favor of 10-year annuities

Similar to l laddering is in ing in stocks regular divi payouts. You stocks with di ent payment t to create a reliable dividend stream. data are available from the Standa Poor's *Stock Guide*, which can be f in many libraries. A good idea is to for companies that provide long- holders with increasing returns thr fairly regular dividend increases. *The Outlook* (800 852-1641) suggests dividend portfolio: 75 shares of E Residential Properties Trust, 130 sh of Enova Corp., 105 shares of Car Power & Light, 80 shares of Medit 85 shares of American Electric P and 75 shares of Weingarten Realt recent prices, you'd pay $20,742 b commissions and get annual incon about $1,206, and a yield of 5.9%.

Whether you consider any of income-generating options now or you should always plan to keep a c of your retirement savings in gr investments. That will help your po lio beat inflation—and ensure that savings outlive you.

By Toddi Gutner in New

Will you outlive your 401(k)?

Today, people are looking forward to long, active retirements. Which means taking another look at how you intend to pay for it.

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MUTUAL FUNDS

Funds That Change With You

They can make the task of shifting your asset mix easier

Building a retirement nest egg with mutual funds can be daunting. Even if you assemble what is an ideal portfolio today, you're far from done. As you near the time when you'll start drawing on the money, you'll have to shift your asset mix periodically to more conservative investments. Internet highfliers may be acceptable risks when you're 30 years from retirement, but not when you're months away from a gold watch.

Time-targeted funds can help make this asset shift easier. Indeed, given the graying of America's baby boomers, it's surprising that more mutual-fund companies haven't followed Wells Fargo and Fidelity Investments in developing such funds. Wells's Stagecoach funds have been around for four years, Fidelity's Freedom funds, just two.

The idea is this: If you are 35 today, you would choose Stagecoach LifePath 2030 or Fidelity Freedom 2030. Each has a heavy weighting of equities now, but by changing the portfolio, they dial down the risk over the years. They reach their most conservative posture—mainly, but not entirely, bonds—by 2030, when you'll be 67.

The two families offering these funds take different approaches (table). The Stagecoach funds use asset-allocation models that incorporate 17 different investment categories, such as large-cap growth stocks, small-cap value stocks, international stocks, long-term government bonds, and mortgage-backed securities. By contrast, the Fidelity Freedom portfolios invest in the money manager's huge array of mutual funds.

Wells Fargo and Fidelity also differ in how they sell the funds. Stagecoach's A shares have a 4.5% sales charge on investments of less than $50,000. The one exception is the no-load Opportunity Fund, formerly known as the 2000 portfolio. (That conservat fund is about half in intermediate government bonds one-quarter in equities.) All the Stagecoach funds hav 1.2% annual expense ratio, about 0.1 percentage point be the average for asset allocation funds. The B shares have up-front load but have higher expenses, 1.7%, plus declir redemption charges on shares sold in the first six years. Fidelity funds are no-load, with an expense ratio of 0.08%. But this is no free lunch. Shareholders indirectly h the expenses of the funds inside the Freedom portfolios.

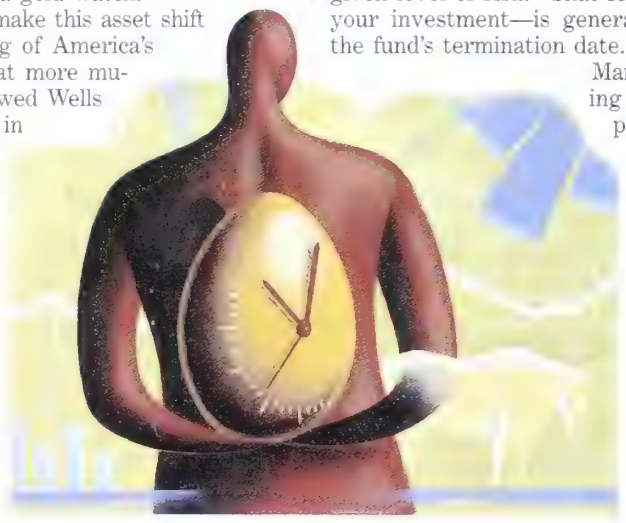
Will these funds do the job? The concept behind th makes sense, but their track records are short, and n has gone the distance to termination. To evaluate them, should consider the alternatives.

For younger investors who m choose the 2030 or 2040 portfolios, an equity-fund portfolio could work as wel many years until you need to take bonds and money-market securities. you just select equities, you may m mize return," says Mark Fujii, Wells' rector of mutual-fund products. "But you haven't mana risk. Through diversification, we try to maximize return f given level of risk." That risk—the volatility in the valu your investment—is generally determined by the tim the fund's termination date.

Many more fund companies—inc ing Vanguard, T. Rowe Price, penheimer, and BT Investme run "life cycle" funds, which also asset allocation portf geared to investing for re ment. But those funds managed to be aggres moderate, or conservative. investors using them nee determine on their own w one to start with and whe shift to another. Rc Reynolds, president of th delity Institutional Retire Group, says Fidelity laun the Freedom funds bec many customers, even with help of questionnaires brochures, had a hard grasping the concept of tolerance. "Everybody u stands time," he says. "S created funds that focus time horizon."

A packaged product su Wells Fargo's or Fidelity sumes one size fits all: your needs and ability to risks are similar to othe your age. That may n true. Most financial adv suggest you seek a personalized investment But if your alternati amassing a lot of funds no overall strategy, a tim geted fund might ma worthwhile investment.

By Jeffrey M. Lade in New



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PORTFOLIO	TOTAL RETURN 1998*	1997
2000	9.1%	15.6%
2010	12.6	19.7
2020	14.7	21.5
2030	15.2	21.6
INCOME	5.7	11.2

*Through Jun. 30

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www.wellsfargo.com/investing/stgchfnd

PORTFOLIO	TOTAL RETURN 1998*	1997
2010 A	9.1%	16.3%
2020 A	12.1	20.9
2030 A	14.3	24.2
2040 A	16.5	26.5
OPPORTUNITY A	5.3	10.4

tunity, which is no-load, 1.20% expense ratio

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BUSINESS WEEK HARRIS POLL

Nothing Retiring About These Retirees

Retirees used to be easy to spot—they were the older people who weren't working any more. You'll have a harder time making that distinction today. Relatively affluent Americans 45 and older don't plan to retire until they're 63. But 75% intend to land a job after they leave their primary career. For them, retirement promises flexibility, not unemployment. They'll work part-time or consult—in large part to stay challenged, though they expect earnings from such work to account for a quarter of retirement i come. Almost all, though, also intend to fit travel ir their lives, and a majority expect to pursue some e ucation. Most are sanguine about their financ prospects. Given the earnings from their post-reti ment jobs and expected investment returns on t order of 15% a year, only a quarter say they worried about having enough income. The bigge concern, by far: heavy medical expenses.

BUSYBODIES

Which of the following best describes your employment expectations after retiring/your retirement status?

	NOT RETIRED	RETIRED
Work in my former occupation, at reduced hours and pay	15%	4%
Work full-time in a different occupation	2%	5%
Work part-time in a different occupation	28%	9%
Consult within my former industry	19%	8%
Consult in a different industry	1%	2%
Start a new business	10%	19%
Will not/do not work for pay	25%	53%

NOT JUST THE MONEY

Why will you continue/have you continued working after retirement? (multiple responses allowed)

	NOT RETIRED	RETIRED
I (will) need the money	43%	25%
I want to stay challenged and stimulated	85%	92%
I want to stay close to friends and associates in my job	10%	13%

THE INCOME PIE

What percentage of your retirement income do you (expect to) get from each of the following?

	NOT RETIRED	RETIRED
Employer-sponsored pension or savings programs	28%	35%
Personal savings and investments	23%	25%
Social Security	21%	7%
Earnings from continued employment	15%	14%
Employer stock programs, including stock option	6%	2%
Inheritances	2%	1%
Other	5%	16%

GREAT EXPECTATIONS

Approximately what annual rate of return do you expect from your investment in each of the following?

	NOT RETIRED	RETIRED
Stocks	16.1%	14.7%
Mutual funds, excluding money market funds	15.0%	18.9%
Investment real estate	13.4%	11.8%
Bonds	12.5%	12.8%
Money market funds	10.1%	8.7%

ME, WORRY?

How confident are you that you'll have enough income to retir between your savings and investments, Social Security, and ar jobs you have in retirement?

	NOT RETIRED	RETIRE
Very confident	28%	65
Somewhat confident	46%	30
Somewhat worried	21%	4
Very worried	5%	1

MEDICAL JITTERS

What do you consider the biggest single threat to your financi security in retirement?

	NOT RETIRED	RETIRE
Catastrophic medical expenses	46%	40
Outliving your savings	16%	13
Becoming disabled	15%	12
Stock market crash	11%	31
Losing your job	6%	1
Supporting your children	5%	2
Supporting aging parents	1%	1

STAYING OR GOING?

When you retire, do you expect to live in a different region fr where you live now? (non-retirees only)

Yes	42%	No	58

THE NEW NEIGHBORHOOD

Among the following attributes, which is most important in choosing a new place to live?

Cost of living	25%	Job opportunities	12
Climate	25%	Education systems	11
Proximity to family and friends	13%	Crime level	7
		Cultural resources	2

WANDERLUST

Please indicate whether, in retirement, you (plan to) particip in the following forms of leisure travel:

	NOT RETIRED	RETI
Domestic travel	98%	96
Independent travel	91%	8
International travel	63%	6
Cruises	59%	4
Adventure travel	37%	1
Recreational vehicle touring	37%	2
Bus tours	21%	

Online poll of 1,836 adults age 45 and over with incomes of $75,000 and higher, including 281 retirees, conducted for Business W by Louis Harris & Associates. For complete results, go to www.businessweek.com, or keyword: BW on America Online.

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American General Finance • VALIC • American General Annuity • American General Securities Incorporated

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As you hit "send," consider the fact that there are entire corporations who are struggling with the same question. They'd like to utilize the Web to distribute and manage sensitive data, but they also want to know – how safe is it?

IBM, working with business partner Lante, a specialist in Lotus® application development, helped a company called IntraLinks create a secure environment for businesses to work on the Web.

Supported by IBM Global Services, IntraLinks provides a private extranet based on Lotus Domino,™ which allows constituencies to safely work, collaborate, even negotiate online. Proposals, documents, classified plans and contracts (some worth billions) can travel safely.

In addition, fanatical electronic tracking helps assure that each detail, no matter how small, doesn't fall through the cracks (so not only are the walls as thick as they need to be, but the virtual floor is well-built, too).

In less than a year, over $60 billion has been managed using IntraLinks' e-business technology. Costs are down 10 to 30% over standard management practices and document delivery systems. This last point has not gone unnoticed in the world of finance, where an increase in volume of as little as 1% can equal a $20 million boost in revenue.

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COMMENTARY

By Robert Barker

What's Left For the Late-Blooming Boomer?

The first boomers to retire may get the lion's share of those stellar returns

If you came along toward the middle or end of the baby boom, you probably have a lot in common with Dennis Freeland, a dentist in Melbourne, Fla. Freeland, 41, is a husband and father—and a fierce saver. Like the quintessential younger child whose older siblings got to the cookie jar first, "I'm always the last," sighs Freeland. "They always change the rules just before I get there."

You, too, may be used to treading water in the demographic backwash. The earliest postwar babies—President Clinton among them—hit the job market first and now occupy the top ranks, leaving you and your younger peers wondering whether your turn will ever come. The first boomers also blew into the housing market first, pushing prices up, up, and out of reach until bungalows in Santa Monica, Calif., commanded half a million bucks. Then they plunged their 401(k)s into stocks, pushing the Dow Jones industrial average to incredible heights. But by the time the peak earning and savings years for Freeland and other late boomers roll around, will they again be too late to reap the gains their older siblings already received?

This is not an idle concern. By 2011, early boomers will be retiring en masse—even if they've postponed retirement a while to continue working. Some economists figure that spells bad news for the markets—and it's something that can only diminish future returns on retirement nest eggs. "Pension funds are going to be a source of selling pressure, rather than buying pressure, on stocks and bonds," says Stanford University economist John Shoven.

"GRIM REAPER." Shoven and Sylvester J. Schieber, of benefits consultant Watson Wyatt & Co., estimate that from 2010 to 2030—the period spanning Freeland's maximum earnings, savings, and retirement years—the average after-inflation annual total return on stocks might not be today's accustomed 8% but something closer to 5%. Returns on other assets—bonds and real estate, for example—would be similarly suppressed.

Say you're 43 today, expect to retire at 65 in 2020, and by 2015 will have saved $1 million. [illegible] year, that sum would grow to $2 [illegible] by 2025, when you'd be 70 and [illegible] ly have to start taking distribut[illegible] Shoven and Schieber are right a[illegible] nest egg grew at just 5%, you w[illegible] $500,000 less—a 25% reduction. [illegible] friends call me the first cousin o[illegible] Reaper," says Schieber.

Truth is, guessing what shape financial markets [illegible] 20 years ahead is a fool's errand. Two decades ago, [illegible] ruled Iran, the Federal Reserve was one of Washi[illegible] most maligned institutions, and even getting the D[illegible] to 1000 seemed a stretch. Still, an increasing numb[illegible] Americans believe the current bull market in finan[illegible] will last for years.

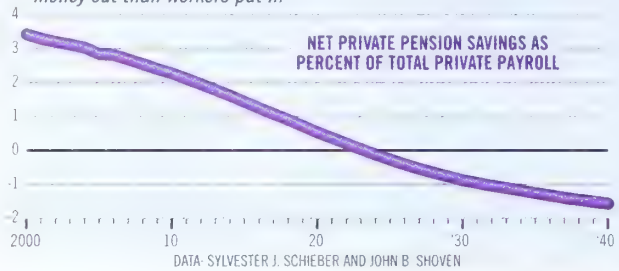
"Now is absolutely the worst possible time to t[illegible] this issue, observes Thomas F. Lydon, president [illegible] Trends Investment[illegible] port Beach (Calif.) [illegible] ment advisory firm[illegible] he finds, "don't wa[illegible] it—it's like bangin[illegible] head against a wa[illegible]

For example, a [illegible] vey of retirement [illegible] ducted for Americ[illegible] mutual funds found[illegible] expect their portfo[illegible] liver average annu[illegible] of at least 20% ove[illegible] five years. That's a[illegible] number expecting [illegible] returns only two ye[illegible] BUSINESS WEEK's o[illegible] wide poll of consumers 45 and older (page 88), co[illegible] Louis Harris & Associates, indicated similar bullis[illegible] vestors who haven't retired yet expect returns of [illegible] 16% for stocks and 13% for bonds, while those wh[illegible] tired anticipate only slightly less. Indeed, Scott L[illegible] chief investment officer at San Francisco-based ac[illegible] 401k Forum Inc., says his neighbor "thinks 20% r[illegible] an entitlement." Lummer says the guy even dipp[illegible] retirement fund to buy a Harley-Davidson motorc[illegible] classic dumb thing to do."

If Shoven and Schieber are right—and they d[illegible] mographics on their side—the market will be sin[illegible] to provide anywhere near the rich returns Lumm[illegible] bor foresees. That could leave many mid- and lat[illegible] without enough in their retirement accounts. If y[illegible]

A Looming Threat to the Stock Market?

The private pension system, now a support to the financial markets, may become a drag to them by the 2020s as retirees take more money out than workers put in



DATA: SYLVESTER J. SCHIEBER AND JOHN B. SHOVEN

roup, what should you do? Think about taking
steps toward preparing yourself for what may

consider your assumptions. If you're counting on
million in 2025—or whatever—it makes sense to
t the returns you're assuming will take
Over the long haul, all-stock
ave returned an average of
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's a rather bad idea to
he market and sit it out
s Shoven, who notes that
ns he sees will likely be spread
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and be happy
it neither should
queeze every last
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was 26.5%. So
edy. Although
ney-market funds
hey can add sta-
ese to hedge your

k about revising your savings plan. Assuming
stment return on your retirement portfolio im-
scaling back your ultimate savings goal or
more now to reach it. If you can, save more.
save more from your ordinary budget, look for
y opportunities—bonuses or other windfalls—
that you can stash in your retirement portfolio. You also may want to join the millions of folks who are retiring later and working longer, allowing them to contribute more to their retirement funds.

William J. Goldberg, a Houston-based partner of the KPMG Peat Marwick accounting firm, says that perhaps the No. 1 issue among the senior executives he counts as clients is when to retire. Should it be at 62, they wonder, or 65? The issue, Goldberg says, boils down to this question: How much am I actually getting paid for working those three extra years?" The good news, he says, is that the answer is easily quantifiable.

SELL TO ASIANS? Shoven and Schieber don't assume aging boomers will cause a market meltdown, just reduced returns. For one thing, says Shoven, corporations could respond to a weaker market by paying higher dividends or repurchasing shares to support the value of their stock. The demographic weight on the market might also be lessened if younger investors, perhaps in Asia or elsewhere, buy the stocks boomers are expected to sell. That's why Schieber suggests you avoid fleeing to the supposed safe haven of real estate and instead keep your portfolio full of assets that would be easy for foreigners to buy. "The less fungible the asset, the more it's going to get hit," he notes. "It's pretty hard for the Chinese to buy your house, but they can buy your stocks."

Expecting less, hedging bets, biding time—none of these are fun, especially when the guy just ahead of you is getting more today. But if you're in the trailing half of the boomer generation, you should be used to that by now. Dennis Freeland finds little use in worrying about it. "What I look at is how I'm going to take care of myself, not what the next guy is doing," he says. "So I just save money. The people in America who do all right are the people who save money." It's just that they may have to adjust their earnings assumptions and savings habits to protect themselves against the graying of their generation.

HOW DO I NURTURE MY NEST EGG?

Well, don't keep all your money in stocks, for one thing. Diversify wisely, for another. And—you guessed it—work longer, save more

Senior Writer Robert Barker writes about personal finance from Melbourne Beach, Fla.

THE INTERNET

Where Silver-Haired Surfers Browse

It's easier to find what you need as more sites tailor content for older users

The senior set is racing onto the Information Highway. When ACNielsen surveyed North American Internet users in 1997, it was surprised to find that 15% of them were above 50—and that they constitute one of the fastest-growing groups on the Web. "Computers are like the new hobby for seniors," says Rob McHugh, senior programmer for Yahoo! Seniors' Guide (table). "They're just hungry for information."

Indeed, Third Age Media (www.thirdage.com), an online news service for senior citizens, found that 83% of users 50 and up log on daily and spend more than eight hours a week surfing. And more and more older users are joining the throng as PC prices fall and adult children give "hand-me-up" computers to mom and dad, notes Ann Wrixon, executive director of SeniorNet, a San Francisco-based nonprofit group.

So how do you join the online crowd? First, you might want to take some lessons in basic computing. SeniorNet (415 495-4990), has trained more than 100,000 older adults at 134 learning centers in 35 states—and on cruises offered by World Explorer. During the courses, seniors teach other seniors how to work with computers, using a curriculum "designed to reduce the fear of technology," Wrixon says. Once online, older computer users become avid shoppers as well as surfers. Third Age found that 50-plus users were 30% more likely than their younger counterparts to have ordered goods and services over the Net.

LINKS GALORE. Web programmers and advertisers are waking up to this market, providing a wealth of content tailored for older users. Yahoo! Seniors' Guide, from the Internet directory company, features original material and links to other sites on such subjects as finance, health, and genealogy. The Yahoo! site, like others aimed at seniors, contains many links—on financial planning, best places to retire, and travel, for example—that will also interest younger users th ing of retiring. Other general-inte search engines, as they try to con their sites from way stations into d nations, are also adding material targ to seniors. Excite's Fifty Plus (www.excite.com/lifestyle/fifty_plus) views many senior-related sites, while cos' Health page (www.lycos.com/he links to community resources for help with illnesses ofte sociated with older folks.

But much of the best material remains at specialized SeniorNet, SeniorCom (www.senior.com), and SeniorsSe (www.seniorssearch.com) provide a mix of links on g parenting, computer use, and such government progra Medicare and Medicaid. Seniors-Site (www.seniors-site features everything from an "attraction adviser" for Or theme parks to chaplains and hospice volunteers.

Among organizations staking out territory on the the American Association of Retired Persons boasts 1,00 pages that draw more than 500,000 visits a month, Mark Carpenter, AARP' line communications coor tor. Members use the s change an address, or membership card, or out travel and service counts. But much of the traffic comes from non bers interested in AARP' tent on policy issues su Social Security reform.

Sites for other senio zen groups tend to b general and more adv oriented: The National cil of Senior Citizens (ncsciinc.org) and the Na Council on the Aging (ncoa.org), for example, pet their efforts to prot niors' entitlement prog

The wide range of on seniors' sites reflect sic fact: Like users of a retirees will mine the I for information on thei interests, sports, and h Still, judging from fe and search requests hoo!'s and AARP's sites topics draw special att from older adults:

Net Resources If You're Retired . . .

TECHNOLOGY SeniorNet (www.seniornet.org) offers courses on computing.

ISSUES The American Association of Retired Persons (www.aarp.org) keeps tabs on Social Security, Medicare.

CHAT Discuss mutual interests in the chat rooms at Yahoo! Seniors' Guide (seniors.yahoo.com).

ELDERCARE CareGuide (www.careguide.net) lets you search for support services by state or city.

. . . Or Thinking About Retirement

FINANCE Figure out how much you'll need at Investor Guide (www.investorguide.com/Retirement.htm) or Quicken (www.quicken.com/retirement). Both offer calculators, planning information, links to other sites.

HOUSING Check out Third Age's real-estate links (www.thirdage.com/realestate).

HEALTH Former Surgeon General C. Everett Koop pitches nutrition and exercise advice at Shape Up America! (www.shapeup.org/sua).

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TH. Two excellent sites for researching medical condi- re InteliHealth (www.intelihealth.com), where the Hopkins Health System posts lots of easy-to-follow and medical advice, and Medscape (www. pe.com), a search service. Both allow users to dig to medical literature by registering for free access National Library of Medicine's MEDLINE database of articles. Healthfinder (www.healthfinder.org) pulls r health information from federal agencies in an at-, easy-to-use format.

RNMENT. Major programs elderly all offer informa- benefits, procedures, and . Among them are Social (www.ssa.gov), Medicare edicare.gov), and Medic- w.hcfa.gov/medicaid.html). dministration on Aging oa.dhhs.gov) offers re- guides and links to the National Institute on Aging's nd social research.

ICE. The Net is overrun with information from online , mutual-fund companies, and stock pickers. You can r fill of investment talk in chat rooms offered by a Online, Yahoo!, and Microsoft Network—if you can aily E-mail bombardment from stock "gurus" and -quick schemers. More useful are sites that steer re- and those who want to save enough to join them—to- ancial planners. The Institute of Certified Financial s (www.icfp.org) offers a referral service, as does the National Association of Financial & Estate Planning (www.nafep.com). The National Network of Estate Planning Attorneys (www.netplanning.com) will let you search for lawyers in your area.

■ **ELDER LAW.** For such topics as age discrimination, Medicaid eligibility for nursing home benefits, and Social Security and Medicare appeals, you could turn to the nonprofit National Senior Citizens Law Center (www.nsclc.org) and the SeniorLaw Home Page (www.senior law.com) sponsored by the New York firm of Goldfarb & Abrandt. The latter features a powerful specialized search engine for, say, doing financial planning for a Medicaid recipient in a nursing home.

■ **CAREGIVING.** Eldercare Web (www.elderweb.com) posts articles on nursing homes, hospices, and legal and financial issues, plus a state-by-state collection of links to support services. Transitions Elder Care Consulting (www.asktransitions.com), a Minneapolis firm, offers a glossary—in large type—of the confusing jargon of official caregivers. Caregiving Online (www.caregiving.com) is the electronic version of a newsletter for those tending an aging parent or neighbor.

For older adults, the Internet isn't just a means to exchange E-mail with the grandkids. If you're 50 and up, increasingly you'll be finding what you need on the World Wide Web.

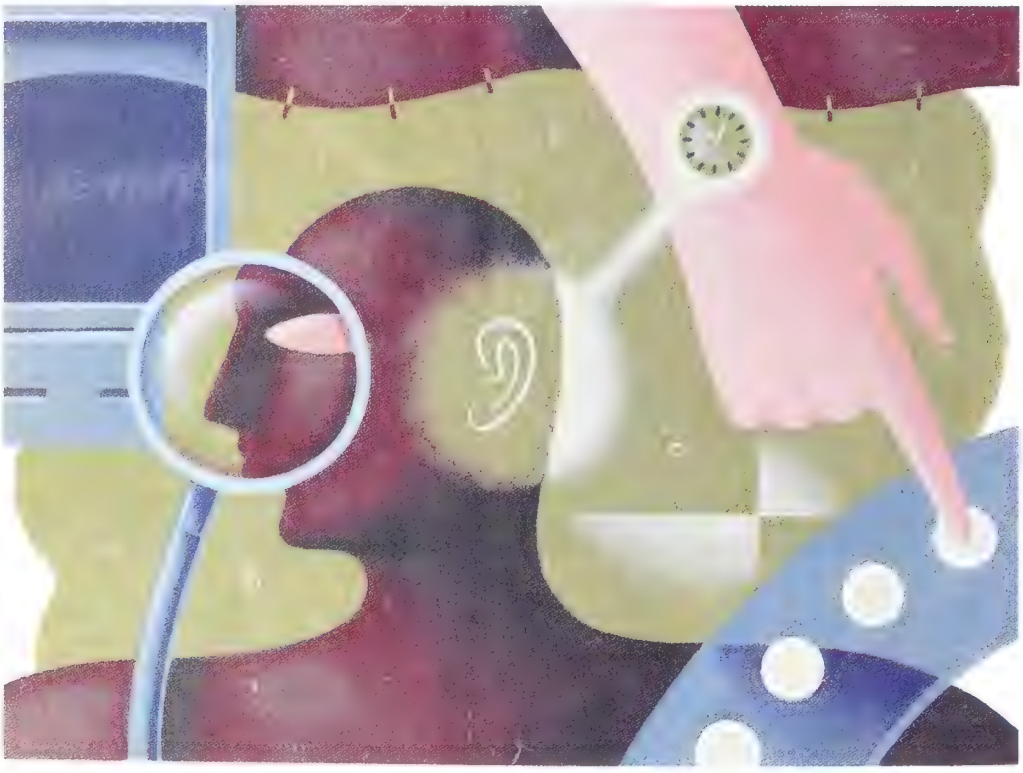
By Mike McNamee in Washington

'HAND-ME-UPS'

More older users will join the throng as PC prices fall and adult children give computers to mom and dad

PRODUCTS

Making Life User-Friendly Again



A host of products can give back some of what time takes away

In 1988, audiologist Thomas A. Powers fit President Ronald Reagan with a state-of-the-art hearing aid. While the instrument could amplify speech, its ability to suppress background noise was limited. But like all things high tech, what was state of the art a decade ago bears little resemblance to today's top of the line. Powers, now director of audiology at Siemens Hearing Instruments Inc., is steering some patients to a tiny, programmable hearing aid that's concealed inside the ear canal. Using digital signal processing, the device allows users to hear a whisper even as a jet passes overhead.

As you age, you may suffer hearing and vision loss and a gradual decline in strength, flexibility, dexterity, and endurance. Fortunately, a slew of high-tech devices can help you surf the Net, chat on the phone, and cook with aplomb.

Around the country, mail-order houses, online merchants, and specialized retail chains are catering to the needs of seniors who can use a little technology to ease the daily grind. Take Independent Living Aids (800 537-2118; www.independentliving.com), a Plainview (N. Y.) mail-order retailer. ILA sells a mo Goldstar microwave that announces, i clipped British ac such basic commanc "Cook meat high' "Cook fish low," whe press the correspor button. Of course, yo extra for the voice: oven costs $365, plus ping, roughly $200 than a conventional m ILA also carries ta scales, watches, cal tors, blood-pressure tors, and, for $695, a ey identifier that r out bill denomina from $1 to $100. Th chine can even ann the total value of a bills it scans, up to $

If you're like man er Americans, you come to rely on yo to stay in touch loved ones or the market. That doesn't to be a challenge i have visual or other impairments. T you better see your keyboard, large stick-ons can be affixed to the ke you have difficulty manipulating th board, you may want to check ou latest advances in speech-recog software.

Such programs as IBM's Via Lernout & Hauspie's Voice Xpres Dragon Systems' NaturallySpeaking allow users to d letters to a PC via a microphone. Improvements in s programs now allow more natural phrasing. "You u have to say 'Bold that,' to switch to a bold typeface, William Meisel, president of TMA Associates, a cons in Tarzana, Calif. "Now, you can say 'Make that bold,' the last word bold,' or phrase it 20 other ways."

GOOD-LOOKING. Speech recognition still is far from p But Bruce Mahaffey, a planner in the IBM Special Systems Group in Austin, Tex., says ViaVoice's acc percentage, for an experienced user, is in the hig That's decent enough for people who want to dispatch or write personal letters.

Software that turns print into speech is another

an help you with your PC. WYNN (or What You Need , a $399 program produced by IBM and Arkenstone of rvale, Calif., can read aloud the text of E-mail and processing files. It also can alter the way text is ited on your screen by enlarging the type, changing combinations, and increasing space between words nes.

re are cheaper ways to magnify files on a computer . The National Institute for bilitation Engineering (800 16) sells a $44 program called Screen Magnifier that can e type on a screen up to ten- here also are high-tech solu- or those who have difficulty g books or documents. The talog offers, at $2,495, the iew System 20-inch Color short for closed-circuit tele- . Its large monitor and built- n lens lets you magnify objects and written materials 50 times. It also functions as a TV and comes complete rolling table whose height can be set to wheelchair For an extra $500, the magnifier can be adapted to C.

e people object that poorly designed lifestyle aids, de- neir benefits, advertise users' physical limitations. Tele- with outsized keys, for instance, signal that the own- a vision problem. "We've never found it's age that ines whether or not people like products," says Mar- A. Wylde, CEO of ProMatura Group in Oxford, Miss., a h company that evaluates products for seniors.

OR HELP. One well-designed product, says Wylde, is reet Messenger, a combination phone and personal ency-response system (PERS) from Elcombe Systems vww.elcombe.com) in Kanata, Ont. It features large, ractive, back- and a hand- patible with aids. If you elp, pressing n on a cord- ndant-trans- dials a family mem- ctor, or 911. kerphone is ed when the es through. unit costs $500. For $25 to $35 a month you can get emergency moni- by a U.S. or Canadian hospi- erican Medical Alert (800 645- and Lifeline Systems (800 45) are among other outfits PERS units. A low-tech product ceived a design award from the an Society on Aging (www. org) is RCR International's Hose- whose large rubber grip makes it simpler to tighten a garden hose on a spigot.

Many products are well-suited to older people even if the designers didn't originally have older folks in mind. Senior Friendly in Northbrook, Ill. (www.seniorfriendly.com), currently rates microwaves, camcorders, and VCRs according to their ease of use among people over 50. Tests are conducted by 50- to 70-year-old users. Manufacturers can pay to license a "Senior Friendly" seal of approval for models with top scores.

Among products that have earned kudos are four microwave ovens—the Sharp R-420AW, Panasonic NN-S667BA, Samsung MW 5470 W, and Kenmore KM-68380. Each has easy-to-use control panels and easy-to-understand instructions. Three simple-to-load, 8-mm camcorders—Hitachi's VLR 625 LA, RCA's PRO943, and Sony's CCD TRV 12—passed muster. So did two VCRs, the RCA VR-615-HF and Phillips/Magnavox VR-362-AT.

Retailers focusing on the senior market carry a wide range of other new items as well. The Mature Mart (www.maturemart.com), an online mall, stocks more than 20,000 mostly low-tech items, from $16 extra-loud phone ringers with flashing lights to a $29 combination cane and folding chair. Centex Corp., a Dallas-based homebuilder, has opened Centex Life Solutions superstores in Skokie, Ill., and Falls Church, Va., featuring scooters, ergonomic cookware, and even a $799 portable shower for elders who have trouble walking to the bathroom. The unit drains through a pump and hose.

From high-tech software to low-tech plumbing devices, the number of items geared toward seniors' special needs is on the rise. They can help make life easier even as age takes its toll.

By Edward C. Baig in New York

IT'S NOT ALL HIGH-TECH

Simple aids, such as large stick-on letters to affix to computer keys, can make tasks easier

"YOUR GOOSE IS COOKED"
Talking microwave ovens, clocks, thermometers, and blood-pressure meters assist seniors with impaired vision

HEAR, HEAR
Concealed in the ear, tiny digital hearing aids amplify sounds you want to hear, while suppressing background noises

BIG AS LIFE
Software magnifies text on a computer screen and reads it aloud. One unit shows printed text on a large-screen TV monitor. Speech-recognition programs let you dictate documents into a PC through a microphone

LS ARE RINGING
pushing a help button on a pendant, sonal emergency response systems auto- ically call for assistance in a crisis

WHERE TO LIVE

When a Home Near the Fifth Hole Isn't Enough

For many, culture, educational offerings, and jobs are as crucial as climate

"My wife says I flunked retirement," says E. Lee Bryan, founder of a medical-technology company. That's why the Bryans wound up at Treyburn, a country club community in Durham, N. C., some 20 minutes from thriving Research Triangle Park. The area boasts golf courses, a moderate climate, and excellent hospitals. It also has three major universities and more than 100 high-tech companies. Since moving from Delaplane, Va., in 1992, Bryan, 61, has formed an information-technology company and taken German and computer-science courses at Duke University. He has also settled into a community full of people like himself. "There are more Type A guys here than in any place I've ever lived," Bryan says.

As people challenge the conventional notion of retirement, they're rethinking the types of places where they want to spend their later years. For an increasing number of Americans, that means choosing an area where they can have access to culture, education, entertainment, history, and a shot at a rewarding full- or part-time job. If you're one of those active retirees—or if you're nearing retirement age but still want to stay in the thick of things—the ideal place for you may not be that condo on the fifth hole. Instead, it may be a house near a university or an apartment in a bustling metropolis.

To be sure, most people approaching retirement don't want to leave home. Of folks over age 50 polled in 1996 by the American Association of Retired Persons, 83% indicated that they would rather stay put—near family, friends, and familiar neighborhoods. Yet more than 500,000 retirees a year do move out of state. While many migrate to the classic sunspots of Florida, California, and Arizona, "I don't think we can take that for granted anymore," says Cindy W. LaRue, director of the Arizona Commerce I Office of Senior Living. These days, people are looking at northern New land, the Pacific Northwest, the Mountains, and other places whose aren't synonymous with retirement

Many of these new hot spots a gressively recruiting retirees. Inst South Florida, you may find yourse over by the marketing efforts of Alabama, Arkansa Carolinas, Montana, Pennsylvania, or Utah. Consider sippi's drive for seniors. It has certified 20 cities as retir friendly for their work and educational opportunitie breaks, and housing availability, among other criteri example, Hattiesburg, with a population of 48,000, bills itself as "Hub City" because it's two hours by car from New Orleans, Mobile, Jackson, and the Gulf Coast. It also has an active theater scene, the Hattiesburg Civic Light Orchestra, two colleges, and a couple of medical centers. Vicksburg, meanwhile, plays up its Civil War roots, while Oxford, home of Nobel prize-winning author William Faulkner and the University of Mississippi, emphasizes its literary connections.

Lee Brya

ON A BUDGET. Are you thinking of moving to a new retirement hot spot with everything from high-tech jobs to a university library close at hand? To help you in your search, we polled experts around the country and came up with a roster of cities, college towns, and job meccas that provide a welcoming environment for retirees who want to live the active life (tables).

For many, low taxes and a reasonable cost of living are the first thing to consider when selecting a new home site. Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming have no state income tax. Tennessee and New Hampshire only tax earnings, Social Security benefits, or public and private pensions. But remember that a no-income-tax state must make up its revenue shortfall somewhere, so it may levy higher property or sales taxes. "Choosing retirement in Alabama over Arizona simply to save a few dollars a year would be foolish unless Alabama has everything you want in the way of retirement

Making Your Move Online

ACCRA COST OF LIVING INDEX www.accra.org Measures relative price levels for goods and services in major urban areas. More detailed print version for $60 for a single issue; $120 for an annual subscription

LIVON: SENIOR LIVING ONLINE NETWORK, www.livon.com Connections to more than 60,000 housing and care facilities

RELOCATION CENTRAL www.relocationcentral.com Links to real estate, health care, and Chamber of Commerce resources

SENIOR.COM, www.senior.com Includes sections on housing for retirees

izona lacks something," says John Howells, author of *To Retire: America's Best and Most Affordable Places* Pequot Press, $16.95).

ead of low tax rates, employment opportunities may igh on your list of requirements. Two-thirds of the oomers surveyed by Del Webb Corp., developer of n City retirement communities, indicated they plan to e working after leaving their primary careers. Owing to t U.S. economy, much of the , from San Diego to Fort Myers-Coral, Fla., is booming with job unities for older adults. As a apital, college town, and head-s for high-tech companies such Computer Corp., Austin, Tex., is e target for retirees looking for ds.

vacation spots you've hit over rs may also have employment ts. R. Alan Fox, editor and pub-f *Where to Retire* magazine (713 3), says "all great retirement tarted as great vacation towns." tance, it's not much of a gamble a job in Las Vegas these days, s bustling tourism and casino es. Vegas also boasts affordable and, most of the year, a de-sert climate. Brooklyn native nuels, 69, a retired commercial and residential real estate salesman, moved there with his wife, Beverly, three ago after visiting for years. Samuels now sells real estate four days a week and earned around $25,000 last year. "I always wanted to be an active senior," he says. "When I first retired at age 55, I didn't work for four months, and I thought I was going crazy."

Many older people would go crazy without intellectual and cultural stimulation. Retired schoolteachers Arthur and

College Towns

CITY	POPULATION	TEMPERATURE AVERAGE JAN LOW/JULY HIGH	COST OF LIVING INDEX*	COMMENTS
ASHLAND, ORE.	18,560	30/91	99.8	Friendly town with Shakespeare festival. Home of Southern Oregon State College
CHAPEL HILL, N.C.	43,539	29/88	105.9	Research Triangle area. Home to Duke University, University of North Carolina, N.C. State, and high-tech companies
FORT COLLINS, COLO.	106,000	13/85	106.7	Mountain climbing, cross-country skiing, and Colorado State University
IOWA CITY, IOWA	60,148	21/87	97.5	University of Iowa provides the benefits of a Big 10 college
STATE COLLEGE, PA.	39,587	20/83	NA	Penn State is providing land for a retirement community

*U.S. average cost of living=100

DATA: BUSINESS WEEK, ACCRA, PLACES RATED ALMANAC

here he takes German and computer science: "There are more Type A guys here than in any place I've ever lived"

Ex-teachers Art and Doris Lundahl at Ashland, Ore.,'s Elizabethan Theatre

Doris Lundahl moved from Southern California to the picturesque town of Ashland in southern Oregon because "it has all the cultural advantages of a large city." The tiny town of 18,560 is famous for the Oregon Shakespeare Festival, held eight months of the year. Nearby, in the 1850s gold-rush town of Jacksonville, the outdoor Britt Festivals present dozens of classical, jazz, and country artists each summer. "I would compare it to the Hollywood Bowl without the hassles," says Doris, 70. The Cascade and Siskiyou Mountains are also close by, so sports-minded retirees can ski, hunt, and fish. And Ashland is home to Southern Oregon State College, where Arthur has done some part-time teaching.

Indeed, few retirement areas provide as much cultural enrichment as a college town. "Retirement communities that can be part of campus life allow people to continue to grow," says Leon A. Pastalan, author of *University-Linked Retirement Communities* (Haworth Press, $49.95). And from Charlottesville, Va., to Hanover, N. H., you can always count on having plenty to do in a college town. If it's not university-sponsored concerts and lectures, your choice may be volunteer programs and sporting events. Says retirement expert Mark Fagan, a professor of social work at Jacksonville State University in Jacksonville, Ala.: "Retirees and college students are always looking for the same thing: a good time."

You may even want to go back to class (page 106). Many state-run institutions will waive tuition for seniors who want to monitor classes or earn degrees. College towns also tend to offer abundant health-care facilities, especially at universities with te hospitals. And housing is usual fordable. "The best rental mar the U.S. is in a college town," David Savageau, author of *Retir Places Rated* ($19.95, Macmilla Jacksonville, Ala., a retiree can two-bedroom apartment for abou a month or a three-bedroom, square-foot house for around month, says Fagan.

CITY SLICKERS. Some universiti recognizing that they're a magn retirees. The board of trustees of sylvania State University in Sta lege, Pa., has approved the de ment of a 160-acre planned comm on university and privately owne for people over 55. A portion land will be used for a continuou facility. Although Penn State w own or operate the community dents will have access to campu grams and facilities. In Bloom Ind., meanwhile, the 30-acre owood Retirement Community is the street from the University ana campus. Originally develo IU for retired faculty and stu Meadowood is now open to any or older who is willing to pay the $1,100 to $2,600 n rental. There's a six-month waiting list.

While a college town should offer a friendly envir for retirees, if you're a lifelong city slicker, nothing ca the kind of cosmopolitan lifestyle found in urban A Sure, retirees may want to escape the crime, cong and high living costs of many cities. But to take advan urban life, you don't have to live downtown.

For example, the scenic town of Bellingham, W about 80 miles from Seattle and 50 miles from Vancouv Sequim, Wash., another Pacific Northwest retirement h some 70 miles from Seattle. Del Webb is developing northern-climate Sun City in Huntley, Ill., about an

Job Meccas

CITY	POPULATION	TEMPERATURE AVERAGE JAN LOW/JULY HIGH	COST OF LIVING INDEX**	COMMENTS
ANNAPOLIS, MD.	33,234	24/87	NA	Near Baltimore and Washington home of U.S. Naval Academy. Gr boating, water sports
AUSTIN, TEX.	1,085,900*	39/95	99.4	State capital, college town, and high-tech center
FORT MYERS-CAPE CORAL, FLA.	489,000	53/91	99.4	Where Thomas Edison and Hen Ford spent their winters. Gorge beaches
PALM SPRINGS, CALIF.	43,000	40/108	114.4	Country-club lifestyle. Home to Bob Hope and Gerald Ford. Excellent medical facilities
SAN DIEGO, CALIF.	2,690,255*	48/76	122.8	Ideal climate, good job market, Major League sports

*City and county **U.S. average cost of living=100

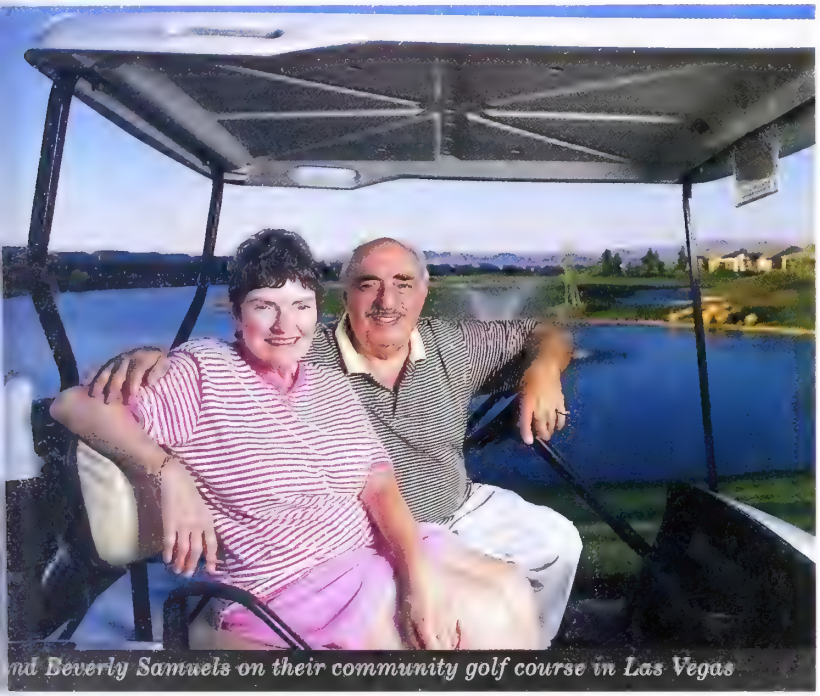
DATA: BUSINESS WEEK, ACCRA, PLACES RA

rom downtown Chicago. The company says 13,000 peo-ve expressed interest in it; there's room for just 5,000 . Other areas that many retirees have retreated to in-New Jersey's Monmouth and Ocean Counties, which thin easy reach of New York and Philadelphia by car or ransit.

, many retirees choose to remain inside city limits, liv-what Michael Hunt, director of the Institute on Aging lt Life at the University of Wisconsin, terms "NORCs," urally occurring retirement communities. A NORC is to be an urban apartment complex that wasn't neces-designed for seniors but seems to attract them through of mouth. Such buildings can be hard to spot, since lon't typically advertise. Hunt says the best way to iem may be by contacting local nursing associations b companies. NORCs' chief benefit: Seniors, especially those who are widowed, can enjoy each other's company, walk to shops, and remain city dwellers. NORCs can be found in the Cleveland Park section of Washington, Capitol Hill in Denver, and Squirrel Hill and Shadyside in Pittsburgh.

New York City has NORCs, too—though the Empire State did lose more people over age 60 to migration than any other state in the 1990 census. From job opportunities and public transportation to restaurants and cultural attractions—many of them free—"the advantages to retiring in New York City are virtually endless," says Ken Stern, author of *Lee & Saralee Rosenberg's 50 Fabulous Places to Retire in America* (Career Press, $18.99).

What happens if the retirement spot you pick doesn't work out for you? That's what happened to Larry and Gail Buckley, who retired from jobs at Bell Atlantic Corp. They left their Annapolis (Md.) home in 1991 for a new house in Manatee County on Florida's west coast. "The heat was the thing I couldn't deal with," says Gail. So last October, the Buckleys moved to Ford's Colony, a retirement community in Williamsburg, Va., which they'd visited several times on vacation.



nd Beverly Samuels on their community golf course in Las Vegas

REVERSE MIGRATION. In moving to Virginia, the Buckleys joined a new demographic group: the "halfbacks"—those who retire to Florida, grow disenchanted, and move roughly halfway back up the East Coast to the Carolinas or Virginia. Florida attracted nearly 452,000 out-of-staters above age 60 from 1985 to 1990, according to census data culled by social gerontologist Charles F. Longino, author of *Retirement Migration In America* (Vacation Publications, $39.95). But during the same period, 129,000 migrants over age 60 fled the Sunshine State, many to points north.

How do you bolster your odds that the retirement spot you pick will suit you? Obviously, you must draw your own set of priorities, whether it's sticking close to your grandkids, mixing job opportunities with culture, or escaping into the wilderness. Then, consider renting a place before you make a downpayment on a retirement home. That will make it easier to leave if the place doesn't measure up. And do check out a prospective retirement area numerous times during the year. An inviting climate in winter may be unbearable during July and August, and a spot that seems secluded part of the year may be teeming with tourists during other seasons. Only after you've satisfied yourself should you set up shop in a new community. But on the other hand, as an active retiree, your menu of residential choices is ever-expanding. It's comforting to know there are so many good places where you never run out of ways to stay young.

By Edward C. Baig, with Tammy Reiss, in New York

Urban Hot Spots

	POPULATION	TEMPERATURE AVERAGE JAN LOW/JULY HIGH	COST OF LIVING INDEX**	COMMENTS
GAS,	1,188,110*	33/105	107.0	Casinos galore and world-class entertainers. Affordable housing, but traffic can be a nightmare
ORK,	7,380,906	26/85	226.2	Great culture, services, and transportation—but expensive
IX,	1,210,420	39/105	101.7	Sprawling city offering abundant outdoor activities
URGH,	1,680,000*	19/83	108.4	Shadyside and Squirrel Hill neighborhoods are popular with retirees
ITONIO,	1,570,500*	39/95	89.9	Great history, top medical facilities, and spectator sports

county **U.S. average cost of living=100

DATA: BUSINESS WEEK, ACCRA, PLACES RATED ALMANAC

More retirees are exploring exotic locales such as Nepal

Mapping Out Adventure Travel

COMPANY	COMMENTS
BUTTERFIELD & ROBINSON 800 678-1147; www.butterfield.com	Upscale biking and hiking tour in Europe, China, and India
ELDERTREKS 800 741-7956; www.eldertreks.com	Group treks for the 50-plus set in Indonesia, Madagascar, and other off-the-beaten-track plac
OUTDOOR ADVENTURE RIVER SPECIALISTS 800 346-6277; www.oars.com	Whitewater rafting trips in the Grand Canyon and down Idaho Salmon River
OVERSEAS ADVENTURE TRAVEL 800 955-1925	Division of Grand Circle Travel offers senior trekking in Nepal sailing off the coast of Turkey
RADISSON SEVEN SEAS CRUISES 800 333-3333; www.cruising.org/radisson	Cruises to exotic places such as Northwest Passage and Marque Islands in the South Pacific
WILDLAND ADVENTURES 800 345-4453; www.wildland.com	Ecotourism trips to the Costa Rican rain forest and the Ama

TRAVEL

Far From The Tour-Bus Crowd

Track gorillas in Uganda, explore a rain forest, or pedal across France

The Baliem Valley in the Indonesian province of Irian Jaya is about as far as a tourist can get from the modern world. But in May, an intrepid group of travelers over age 50, led by Toronto-based ElderTreks, took a jeep to the end of the valley's road. Then they hiked some 30 miles through mountainous terrain inhabited by Stone Age Dani tribes. Led by a native, English-speaking guide, they met the tribespeople, slept in thatched huts, and saw an eerie tribal funeral. "It was fabulous," says Nadine Heyman, 65, a retired principal from Long Island in New York. "I'd go back today."

Forget sedate bus tours and restful cruises. Today, a new generation of retirees is "hungry to go off the beaten path," says Alan Lewis, CEO of Grand Circle Travel in Boston, a specialist in senior adventure travel. Lewis says this $500 million segment of the travel business is growing 30% a year, driven in part by more and more retirees with time, money, and a yen for the exotic. Wildland Adventures in Seattle says seniors make up 60% of the participants in its ecotourism jaunts to such locales as the Costa Rican rain forest.

Senior adventure travel is booming because retirees are in better physical shape, more affluent, and more daring than in the past. Gene Wellman, 71, a retired environmental consultant from Klamath Falls, Ore., typifies the breed. A seasoned business traveler, Wellman has no desire to be herded onto sightseeing buses. So he and his wife, Genevieve, joined small-group trips to French Polynesia and Peru.

As its name implies, adventure travel can be taxing even risky. Abercrombie & Kent in Oak Brook, Ill., w clients of the "strenuous" hiking and "rustic" conditions five-day gorilla tracking trip in Uganda. On such trips, d medical care can be many miles away, so it's crucial to b alistic about your abilities and to screen tour operators. about their insurance, the age range of participants how long they've been in business," as well as about gency backup plans, says Jerry Mallett, president of th venture Travel Society in Englewood, Colo. And don't home without a medical checkup and insurance that allo evacuation in case of a medical emerg Many operators offer such coverage you can buy it on your own.

EASIER TERRAIN. Not every exotic t all that arduous, however. Grand C Overseas Adventure Travel (OAT) u fers a 17-day trekking trip in Nepal the hikes take place in the Hima foothills, where the elevation never 5,400 feet—about the same as De Most of Abercrombie & Kent's African safaris are bill "easy" or "moderate."

Exposure to exotic cultures, rather than physical lenge, is the main aim of many senior adventurers. On Sahara odyssey in Morocco, they visit an encampme Berber nomads. And Radisson Seven Seas Cruises of 25-night voyage through the Northwest Passage in travelers visit Inuit settlements and sail among iceber

All this fun doesn't come cheap. Costs range from $2 person for OAT's Nepal trip to $15,000 and up for the Ra cruise. At those prices, travelers expect—and get—a tain degree of pampering. Butterfield & Robinson's hiki biking trips through France and Italy, popular with t plus crowd, use hotels of the ultraluxe Relais & Cha chain. A far cry from roughing it, but such touches these trips all the more appealing to well-heeled reti even those in hiking boots.

By William C. Symonds in

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FITNESS

The Glory Days Aren't Over Yet

From volleyball to track-and-field, "masters" meets are picking up speed

When David Kaynor organized the first Washington State Senior Games in 1996, the track-and-field meet drew only 50 participants. With medals for top finishers in each five-year age group, "we handed out 105 gold medals and only 10 silvers," Kaynor recalls. But for this year's games, open to those 50 and older, taking home the gold won't be so easy. Kaynor expects 500 to 700 competitors—including more than 50 for such field events as the long jump, shot put, and pole vault.

Amazed at the notion of 70-year-old pole-vaulters? You're not keeping up with the rapidly growing world of senior sports. Today's retirees, healthier and more active than their predecessors, are hungry for opportunities to train and compete. And the growth of recent years is just a warm-up: Every day for the next 16 years, 10,000 to 12,500 boomers will celebrate a 50th birthday. The generation never wanted to grow up has never relinquished its dr of athletic glory. So, sports organizations are bracing rush of gray-haired competitors.

Boomers already are crowding "masters" tourneys—e that are open to athletes 40 and older—in swimming, and-field, and long-distance running. The USA Track & National Masters Championships, slated for July 30-Aug the University of Maine in Orono, is expected to draw competitors. At the national level, athletes must perfo USA Track & Field's age-graded, minimum standards t medals. But events are open to all who pay entry fees. can come out of the stands, put on of shoes, and run," says Jerry Wojc nior editor of *National Masters New* 343-7716), which chronicles masters and-field events.

Even so, novices are better advi start with local tourneys, such a Philadelphia Masters Meets, held other Wednesday evening in July (21 8859), or such regionals as the We gionals Masters Championships in Santa Barbara, Cal July 18-19 (805 965-0581).

SENIOR VARSITY. The 1999 National Senior Games are selective. State organizers this year are holding qua meets for the big event, slated for Oct. 19-29, 1999, lando, Fla. There, more than 11,000 athletes are expec compete for medals in 18 sports, from track-and-fiel swimming to basketball and volleyball.

How can an older athlete find co tors of similar age and skills? In sports, such as golf or tennis, it's Join a club with like-minded me Rowers might find a boat club or lege that lends or rents out its scull team sports, look in the sports or we pages of a local newspaper for listi leagues with senior divisions.

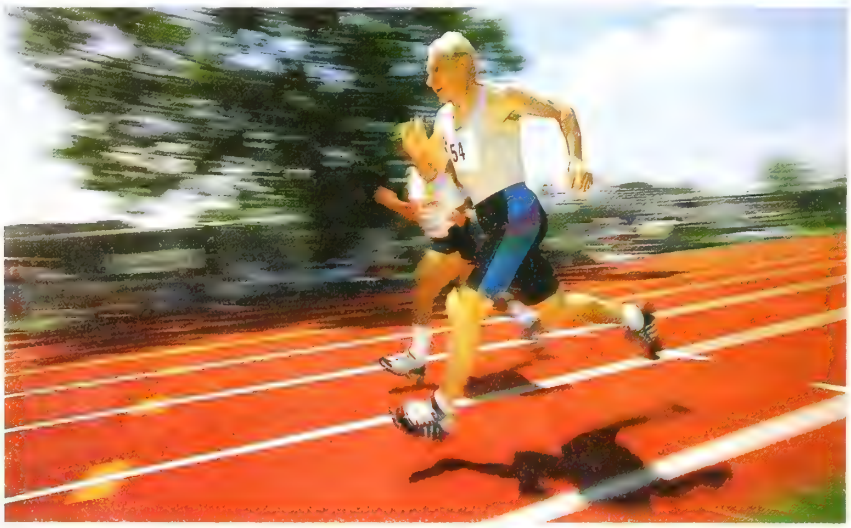
If local leagues don't serve senio ganize a team yourself. Sports dir at YMCAs and other rec centers oft eager to help. But remember: Athle any age should get a physical and pu stop at a local h or community cen classes in ex warm-up, and str before they take playing field. A YMCA of the Sie

Some 11,000 athletes will compete in next year's National Senior Games

Reno, Nev., what started 20 years a cardiac-rehabilitation class has evolv a three-day-a-week volleyball leag some 15 septua- and octogenarians.

This fall, YMCA Senior Programs D LuAnne Steininger hopes to organ over-50 men's basketball league. "V lots of retirees in their 50s who wan back to being the great player th member being," she says. Well, dre Even the healthiest boomer can't le a teenager. But the urge to try is lil crowd the courts, tracks, and pool gray heads in the years ahead.

By Mike McNamee in Wash



Want To Compete? Here's Where To Start

SENIOR GAMES	504 379-7337	State affiliates plan individual and team competitions prior to the National Senior Games in Orlando, Fla., Oct. 19–29, 1999
USA TRACK & FIELD	206 932-3923 www.usatf.org	Sponsors track, road-racing, and racewalking meets for athletes 40 and older
U.S. MASTERS SWIMMING	603 537-0203 www.usms.org	Provides information on swimming contests and workout groups at local pools
U.S. ROWING ASSN.	800 314-4769 www.usrowing.org	Can steer you toward a boat club or college that allows veteran athletes to use its sculls

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EDUCATION

Late-Blooming Scholars

For retired diplomat Lloyd Jonnes, this adage rings true: *Otium sine litteris mors est*, Latin for "leisure without literature is death." In 1975, Jonnes semiretired from a 30-year, globe-trotting career and indulged his fascination with history and ancient languages by loading up on courses at Washington's Catholic University. By 1992, he had earned a PhD in ancient Greek and Latin and two years later wrote a book on stone inscriptions from the ancient Turkish city of Heraclea Pontica on the Black Sea. "I am helping to discover and save the past," says Jonnes, now 74.

College enrollment for students 65 and older jumped 27% from 1991 to 1995

Discovery has taken on new meaning for thousands of like-minded retirees. Once content to be passive, back-of-the-room auditors of the occasional college course, they're now moving into degree tracks. Enrollment for college students age 65 and older grew 27% from 1991 to 1995, and the Education Dept. says some 81,000 people over 65 are now part- or full-time students. Another 356,000 students are age 50 to 64. "We're moving away from the traditional 'three boxes of life'—education, work, and retirement," says Ronald Manheimer, executive director of the privately and publicly funded North Carolina Center for Creative Retirement. "We're going to see people floating in and out of, or combining, those activities."

LEISURELY LEARNING. For 74-year-old Harry Gold, a marketing man who resurrected Dr. Brown's Cream Soda, college wasn't even a choice in his youth. Shipped off to World War II as a radio operator, he returned to join the workforce as a traveling soda salesman. After retiring in 1993, he headed to a satellite campus of Long Island University to study American hi alongside pierced and primped Gen-Xers. "At first I ima them thinking, 'What in the hell is this old geek doing?'" says. "But I'd be crotcheting down the halls, and they'd al help me with my bag. It renewed my faith in young pe What Gold didn't love was exams. "A real chore," he says he survived. He just graduated with a BA in history—and grade point average.

Of course, discipline and test-taking are part of the c experience, so it's crucial to consider what you want o school before you dash to the registrar's window. For credit, leisurely learning, 230 university-sponsored Institut Learning in Retirement offer low-cost seminars. Then ther the tuition-free audit classes, to be h nearly 40 state universities, and educ al tours through Elderhostel Inc.

For those who want a degree pro 20 states provide tuition-free instru for seniors at public universities. Pr schools aren't as likely to offer such ride. And don't think you can avoid core requirements. William E. Jackson, semiretired ad executive wrapping up in philosophy at Northwestern University's night school, c required science classes. "They'll be the last classes I tak says. As a night-school student, Jackson didn't have to tak SAT, but some schools demand it depending on the prog

For all the hassle, seniors who have an eye on a mortar say they couldn't motivate themselves without the discipl for-credit classes. "This isn't something you do haphaza says Creative Retirement's Manheimer. Beyond the class you'll have to find your way around today's heavily com ized universities, almost all of which use the Intern course materials and registration.

Older degree-seekers find that decades of experience working world can come in handy. That became clear to J when he began translating tablets from Heraclea Po Years before, he had helped Turkey set up a giant steel near the site and was able to coax plant execs to give tour of the area. "I knew the plant and I could talk about was going on," says Jonnes. That mix of timeworn expe and fresh curiosity is just one way this generation of old dents is making the school house rock.

By Dennis Berman in New

Jonnes with a sample of ancient stone inscriptions

Advice to the Senior Class

If you haven't set foot in a classroom for decades b are thinking of going for a degree, here are some ste you can take to prepare:

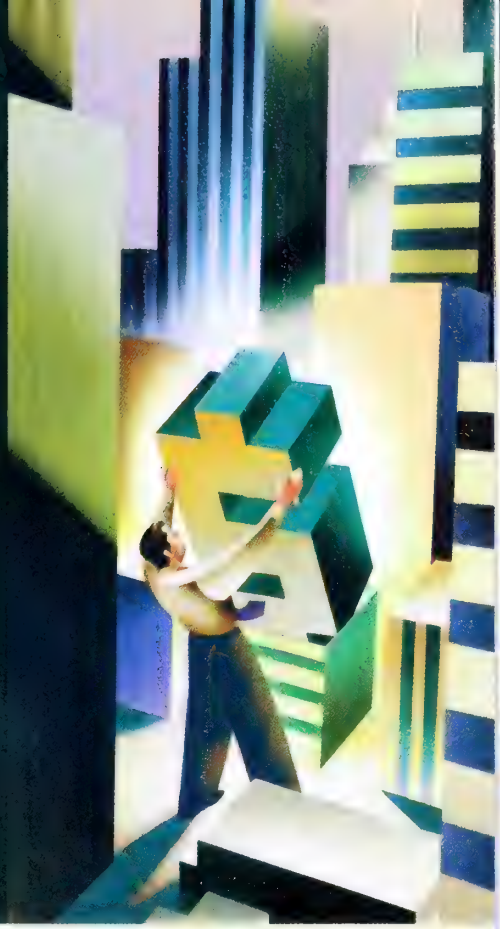
AUDIT Sitting in on a class won't count toward your degree. But it's a good way to get a low-risk taste of college life before you matriculate.

DO A LIFE REVIEW Schools often award credits for li experience. Think about what you've done professiona and personally over the years and ask the registrar if your experiences can be counted toward a degree.

CONSIDER FINANCES Many state and private schools give tuition breaks to senior scholars. Be sure to inq about the best available deals.

GET WIRED If your spreadsheet and Web-browsing sk aren't up to par, sign up for some training.

GOOD THINGS COME IN SMALL COMPANIES.



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JOBS

FIRST STEPS TO A SECOND CAREER

Retirees are finding new ways to stay productive

After 26 years with the U.S. Customs Service and 10 years with Digital Equipment Corp., Robert DiLorenzo of Acton, Mass., retired at 62—for two months. "I didn't know what to do aside from watching C-SPAN and yelling back at the television," he says. So he hit the phone and landed a job as an independent contractor for a company that does background checks on prospective employees at the U.S. Air Force, the Treasury Dept., and the Commerce Dept. Says DiLorenzo: "I don't feel the parade has passed me by."

DiLorenzo epitomizes the changing pattern of American retirement. More and more, retired men and women want to get up in the morning and do something productive. Of 1,555 adults 45 or over polled for BUSINESS WEEK by Louis Harris & Associates, 75% said they planned to continue working after retirement. Among 281 retirees polled in the same survey, 47% are still working. "They remember the phrase, 'retire and die,' and they're not ready to do that," says trends analyst Joyce Gioia of Herman Group, a management consulting firm in Greensboro, N.C.

JOB FAIR JAUNT. When retirees hit the job market, "they want lower stress, flexible hours, work they enjoy doing, and the feeling that they're making a difference," says Gioia. Take Charles T. Russell, 68. For 10 years he was CEO and president of Visa International, the credit-card company, before retiring in 1994. He found that boring, so after a barrage of offers, he decided to work in 1996 as vice-chairman of eFunds Corp., an electronic commerce startup in Tustin, Calif. The job leaves him lots of time for serving on boards, flying his plane, and puttering in his woodworking shop. "If I don't fe coming into work, I don't. You never did that at Visa."

Most pros agree that the best time to plan a second c is before you quit your first. Katherine W. Donahue, a sultant with Deloitte & Touche, suggests joining a trad sociation or attending job fairs to network. A job f where Virginia S. Whitaker, who was taking early r ment from a job in regulatory affairs at Nynex Corp year, hooked up with her current employer, information nology consulting firm Approach Inc. "I wanted to do s thing really different," she says.

To build a second career, you may need to educate yo Before Agnes Eschoo Williams, 57, of Atherton, Calif into selling residential real estate aft years as a college cosmetology teache career counselor, she took courses in re tate, computers, and finance. But i want to put your existing job experie work, you may want to try consulting. fers flexibility and requires no licer investment. "You can move into it an as much and as often as you'd like," says Gary S. Goodma thor of *Six-Figure Consulting* (Amacom, $18).

A number of companies including Decatur (Ga.)-base Span Services (404 373-0005), Stamford (Conn.)-based (203 975-8000), and New York City's Executive Interim agement (212 519-6006) place retired executives as contra sultants in midlevel to senior manag positions for two weeks to a ye more. One hot area is solving 2000 problems. "Often the only who understand these compute guages are retired engineers,' Life Span President Rick Gra

If you want to start a new ness, take a look at such fie health, nutrition, workforce tra and technology—particularly E merce. And no matter what yo reer path, reach high. Sensenig of Lansdale, Pa., w 48 years as a general and t thoracic surgeon. But "it wa to move on," he says. So at went to Temple University School. Now 77, he's preppi the bar exam. "I'm not looking associate's job working 7 weeks and hoping to be a part 10 years," he says. "But I t can be of service in the medic practice field." That's a lon from "retire and die."

By Meg Lundstrom in Ne with Amy Barrett in Philadelp

Online Career Assistance

AMERICAN ASSOCIATION OF RETIRED PERSONS
www.aarp.org/working_options/home.html
Information on staying employable, job search, alternate work options

COACH UNIVERSITY
www.coachu.com
Advice on how to use a career coach—or how to become one

EXECUNET
www.execunet.com
Networking service for executive-level jobs

LYCOS CAREERS
www.lycos.com/careers
How to look for jobs, prepare a resume; links to other career sites

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BusinessWeek
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VOLUNTEERING

Anyone Want To Lend A Hand?

Retiring boomers are breathing new life into service organizations

William P. Hall tried to retire not once, but twice. After a career at the consulting firm A. T. Kearney Inc., he retired at age 57 in 1980. But a life of leisure proved unfulfilling, and Hall quickly returned to work as a marketing executive at investment firm Duff & Phelps. When it came time to retire again, Hall decided to look for something more satisfying than fishing and golf. So he went to the Executive Service Corps of Chicago, where he draws on his skills to devise strategic and marketing plans for not-for-profit agencies, including one that finds work for the mentally disabled. "The Executive Service Corps filled a void in my life," Hall says.

HUNGRY FOR A CHALLENGE. These days, retirees are breathing new life into the world of volunteerism. Today's retirees are leaving their careers healthier and more active than the generations before, and they're finding a host of volunteer opportunities—from serving as ersatz drill sergeants in boot-camp-style schools for troubled teenagers to staffing clinics for indigent patients. By demanding assignments that will challenge them just as their careers did, they are changing the nature of volunteerism.

Helping Others

CHRISTMAS IN APRIL 202 483-9083, **www.Christmasinapril.org** Organizes a national work day on which retirees make minor repairs on homes for poor or disabled elderly.

EXECUTIVE SERVICE CORPS 212 529-6660 Retired managers help with board development, create strategic plans, and provide financial advice for not-for-profit agencies.

REACH OUT 401 729-3284, **www.reachoutweb.org** Retired and active physicians provide low-cost medical care to uninsured patients. Robert Wood Johnson Foundation provides funding for 39 Reach Out clinics nationwide.

RETIRED AND SENIOR VOLUNTEER PROGRAM 800 424-8867, **www.seniorcorps.org** This government-run agency provides information about opportunities ranging from serving as museum docents to working as instructors in youth boot camps.

"These people are looking for more meaningful activitie the systems they may want [to serve] are not yet enough," says Laura B. Wilson, director of the Center ing at the University of Maryland.

So to find a good fit, would-be volunteers should con nonprofit commitment with the same critical eye used to job offers. The opportunity should have a clear job desc with time commitments and scheduling flexibility. The z zation should offer an orientation at which volunteers lea nonprofit's history as well as performance expectations. unteer coordinator should be available to answer questio schedules, and communicate with clients and volunteers

For many, it's also important that the work provide panionship, either with other volu or with clients. And though it may like a trifle, perks such as award ba and outings make the work more fu

Government and national service a can be good clearinghouses for infor Organizations operating under the u la of government-run National Seni vice Corps include the Foster Gra ents program, the Senior Com program, and the variety of opport available under the Retired Senior teer Program. An online clearingho information is the Volunteer (www.epicbc.com/volunteer/inde

Some of the most e prospects have come out o ects created by retirees t community needs. The Robert Wood Johnson Foundati cently funded Reach Out, tem of 39 clinics staffed by retired doctors and uninsured patients. Th was spawned by the teers in Medicine Cli Hilton Head Island, formed in 1992 by Jac Connell, a retired pedia Christmas in April, a n program in which retir minor repairs on homes and elderly people one April, began as the brainch retired Baltimore doctor. Aft ing the National Guard's Challenge camps for troubled Janet Stoeppelmann, a former RS unteer, set up a similar boot-cam school staffed mostly by retired military and defense workers.

Perhaps the nation's best-known volunteer, former dent Jimmy Carter, has helped negotiate political con Korea and monitored elections in Haiti and other But what stands out most for him is his volunte with Habitat for Humanity: 30 people descend on a si week and, standing side by side with owners-to-b homes from the ground up. "Volunteer work takes u our self-enclosed, protected environment," Carter say biggest reward has come from breaking down the barr tween rich people like me and poor people whom we wise never would have met." For Carter and thousand low volunteers, it's one of the rich rewards of life afte

By David Greising in

It's the crowning moment of the PGA TOUR West Coast Swing presented by Bank of America: the final round of the AT&T Pebble Beach National Pro Am. This event, on August 17, determines the 1998 "King of the Swing," the player atop the PGA TOUR money list at the end of the West Coast Swing. And to be named King, you can't just be good. You have to reign supreme.

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COMMENTARY

By Jimmy Carter

The Best Years of Our Lives

Few people have turned retirement into an opportunity for volunteerism with more enthusiasm than former President Jimmy Carter. Now 73, Carter is chairman of the nonprofit Carter Center in Atlanta. BUSINESS WEEK asked Carter to explain why he spends his time volunteering—and why he finds it so satisfying.

Retirement taught the ex-President lessons the White House never could

When I retired from the White House in 1980 (four years earlier than planned), Rosalynn and I were faced with deciding how to spend the rest of our lives. We were fairly young —both in our 50s—and unemployed. We went directly from the White House to our home in Plains, Ga. (population 700), where we had not lived since I was elected governor.

You can imagine that this was not an easy transition. But we agreed that Plains was our home and where we wanted to stay. I had no desire to run again for public office, so we started thinking about how we could use some of the skills and experience we had acquire years to work on issues that h been important to us.

We did a lot of soul-searchi year, and out of this process c for the Carter Center (www.c org). We envisioned a nonprofi affiliated with any governmen party, where we could bring p resources together to promote peace and improv around the world. We opened our center on the Emory University in 1983 and moved into our p headquarters, adjacent to the newly built Jimmy brary & Museum, in 1986.

Over the years, Rosalynn and I have turned r into another career through our work at the Ca And I have to say that our post-Presidential yea even more fulfilling than our years in public offi of the Carter Center, we have traveled to more countries. In North Korea, Haiti, Nicaragua, Lib

Scenes from a retirement, clockwise from top: Carter at a Habitat for Humanity site in Houston; taking a break with Rosalynn; observing Haitian elections, 1990; and at an immunization drive in Atlanta, 1993

er nations, we resolve conflicts otentially explo- We've spent note villages in ing residents cate Guinea e and handing licine to control ss. In other ca, we've helped ease grain and ion as much as imple, inexpen- ral practices. ced human elped Third ies draft master elopment. home in the nn has contin- ts on behalf of ill, building on First Lady of of the U.S. inner city resi- nta develop improve their lives, sharing what we've learned an 100 other cities. When we're not working for enter, we spend a week each year building ther volunteers for Habitat for Humanity in the er countries.

rojects have enriched my life in untold ways. hings I never knew as a state senator or gover- President. While reaching out to others, Ros- ave filled our own needs to be challenged and luctive members of our global community. way, we've also found others seeking opportuni- me, experience, and resources to alleviate suf- prove lives. For example, at the Carter Center esources with those of our many partners—in- ations, foundations, and individuals. I've visited es of donors including Merck, DuPont, and Service, and many were moved to tears when ow their companies' donations have helped free ica from Guinea worm disease and river blind- the struggles of a family in our own country.

Let me give you another example of how retirement has changed how we view the world. Rosalynn and I have led Carter Center teams to observe—and sometimes mediate—free and fair elections in some 15 countries. In 1990, we stood in line with Haitians at the polling place where, just three years earlier, dozens of people had been killed by government-sponsored terrorists while trying to vote. Many had risen in the middle of the night to walk 10 or 15 miles to stand in that same line—even though they feared for their lives. As we traveled around Port-au-Prince that day, we talked to people who had waited for hours just for the opportunity to vote—a sacred privilege that we and others often take for granted in the U.S.

We live in a land of opportunity, and our retirement from political life has opened a whole new world of excitement and challenges. We've also been able to spend more time with our children and grandchildren and enjoy ourselves with new hobbies and interests. I learned to downhill ski when I was 62. We have taken up bird-watching, and I've spent a lot of time in the woodworking shop in my garage, making furniture for family and friends. Rosalynn and I and several family members have climbed the Himalayas, and have reached the tops of Mt. Kilimanjaro and Mt. Fuji. We fish in many places and relax at our cabin in the Georgia mountains.

For us, retirement has not been the end but a new beginning. We hope to spend many more years actively making the most of the rest of our lives. □

INTELLIGENCE BRIEFINGS

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The following article appears on S&P Personal Wealth, www.personalwealth.com, the interactive investment advisory service for the individual investor:

A BALANCED APPROACH TO GETTING SOLID RETURNS WITH LOW RISK

Looking for a mutual fund that has low volatility with above average returns? Consider a **balanced fund**. This type of fund seeks to maximize total return through a combination of capital growth and current income. Typically, about 60% of a balanced fund's assets are invested in large-cap companies with market capitalizations of more than $5 billion, although some balanced funds buy small-cap or mid-cap stocks. The remaining assets are often invested in corporate bonds, Treasury issues, or bonds issued by government agencies.

The combination of stocks and bonds in these portfolios allows for greater stability in return because of the more conservative nature of the fixed income portion of the portfolio. The equity part of the portfolio boosts overall returns. The bond percentage in the portfolio will typically have a standard deviation (a measure of a fund's volatility; the greater the standard deviation, the greater the fund's volatility) that is about one quarter that of the stock portion of the fund.

These portfolios also normally provide an investor with quarterly dividends. Usually, the dividend yield is under 4%, which is less than a taxable money fund, but it is still significant.

The stability of these funds becomes attractive to those investors who are looking for both exposure the stock market and some income generation. Wh the stock market reaches record highs or is in protracted consolidation, investors often look balanced funds in order to reduce overall risk.

One of Personal Wealth's top balanced funds is **Vanguard STAR Fund (VGSTX)**. This is a unique fu that owns other funds of the Vanguard family.

We consider the fund a large-cap balanced fu because its equity allocation consists of large- stock funds such as the **Windsor II Fund**. As of

highlights from S&P Personal Weal

most recent report, the fund held about 60% in eq funds and 40% in fixed income funds, including ab 13% in each of **Vanguard Money Market Prime Fu** and **Vanguard GNMA Fund**. The fund has a stand deviation of about 7%, which is less than half t of the S&P 500 Index. However, the fund has be able to achieve an average annual total return o the last five years of 16.2% and 21.6% over the s three years.

As you can see, the right proportion of stock bonds and the right individual stock and bond se tions can produce great results with low risk.

Another one of our favorite balanced funds is he large-cap **Founders Funds: Balanced Fund (FRI** As of our most recent report, the fund's portfo consisted of about 63% stocks, with the balanc cash and government agency bonds. Its stan deviation is just 6.6%, but its returns are excell The three-year average total return is now 22 while the five-year is 17.3%. The yield on the is about 2.5%, which is still far better than the 500, which is about 1.4%.

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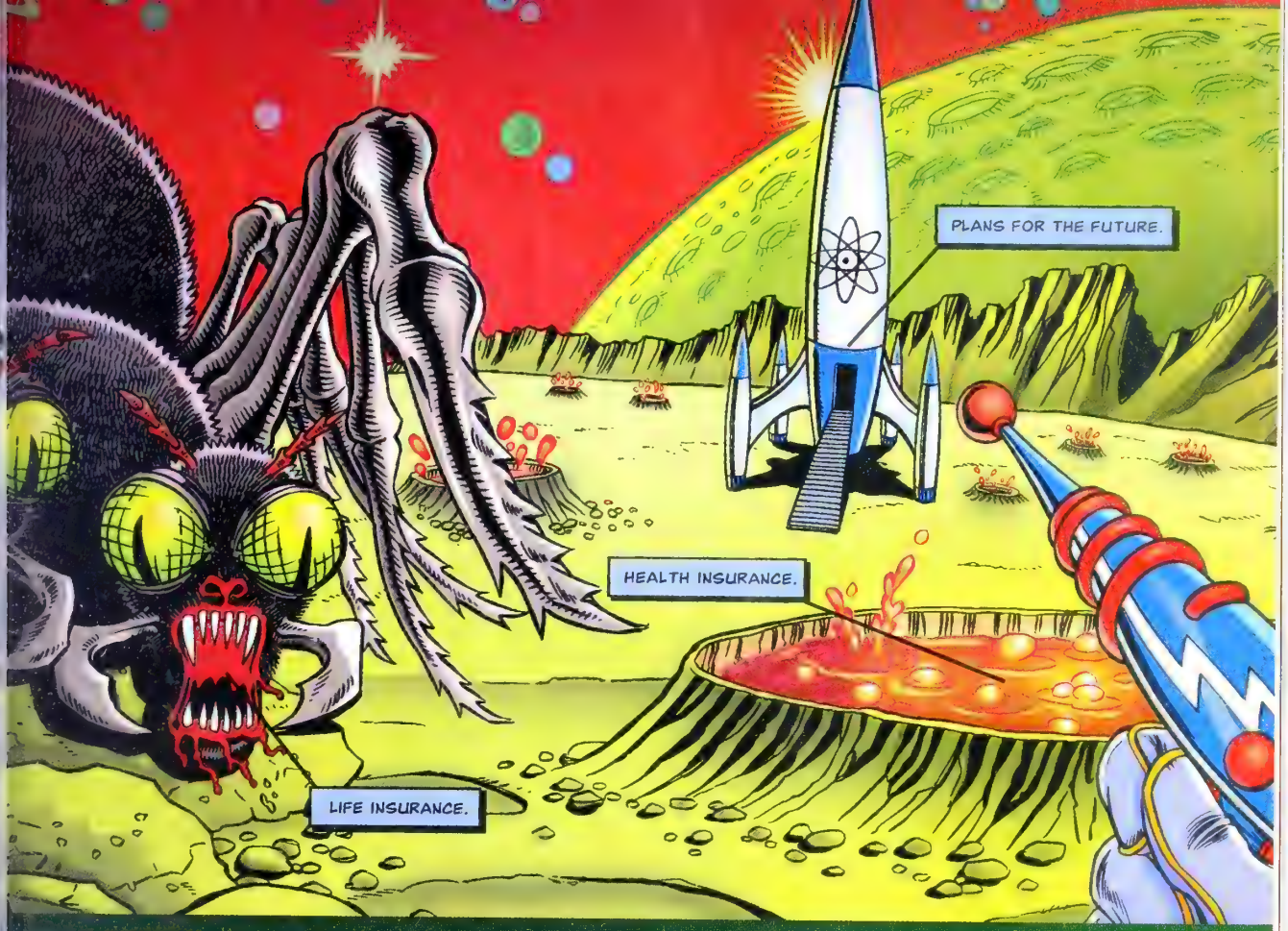

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BY GENE G. MARCIAL

AN EVEN SHARPER EDGE ON GILLETTE

A lot is riding on the new Mach 3 razor from Gillette (G): Will it deliver the goods for this consumer-products leader? Gillette started shipping the Mach 3 on June 26. And early indications are that consumer response is better than expected, according to some pros. Gillette stock, which had been marking time at around 55 a share in early June, had crept up to 61 by July 7.

"Mach 3 is going to be a super product and huge winner for Gillette," argues Lew Rabinowitz, president of New York's R. Lewis Securities, whose bets on Pfizer, Viacom, and Time Warner in the past 18 months have produced outsized gains for his portfolio. Rabinowitz says that the Mach 3 has yet to stir up much excitement among the company's investors. But the enthusiasm among consumers so far, he says, is making some Gillette watchers more bullish on the stock.

RABINOWITZ: *Sees Mach 3 as a winner*

One of them is Andrew McQuilling, an analyst at investment firm Schroder & Co. Mach 3 is as big an improvement as the Sensor was in 1990, he says. It should ensure "healthy results" for Gillette's razor-blade division for the coming five years, he adds.

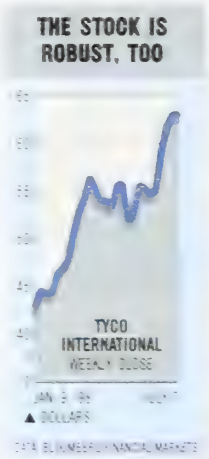
He acknowledges that the Mach 3 will be a "central controversy" for Gillette investors and that the early figures on sales—and on cannibalization of other Gillette razors—will affect the stock price. But McQuilling believes that "earnings should surprise on the upside in 1999," if Gillette reaches its Mach 3 targets. The analyst says unit sales so far are "better than Schroder's forecast."

McQuilling says Gillette should earn $1.45 a share this year and $1.73 in 1999, up from last year's $1.24. The figures are adjusted for a 2-for-1 split that took place in June.

Although the stock trades at a price earnings ratio of 39, based on the 1998 estimate, Rabinowitz believes Gillette is still undervalued. Given Mach 3's potential and Gillette's world leadership in razor blades—and in alkaline batteries—the stock should hit 80 in a year, he says.

RIP-ROARING EARNINGS AT TYCO

In picking stocks, John Davenport, chief investment officer at Mentor Investment Group, takes the high road: He looks for bargains only among companies with market caps of $16 billion to $26 billion and earnings growing at 15% a year. So Davenport is staking a claim in Tyco International (TYC), a global conglomerate that has been busy acquiring other companies. (Tyco was last featured in this column on Mar. 14, 1994, when the stock was at 13, adjusted for splits.)



"It's hard to ignore Tyco, for several reasons," says Davenport. Its earnings are growing twice as fast as Microsoft's: Tyco's results should be up 50% this year and 40% the next, he notes. And with its latest buys (the most recent was U. S. Surgical), Tyco's revenues about match 3M's. Yet the stock, now at 63, has a p-e ratio of just 21, based on estimated (calendar) 1999 earnings of $3 a share, compared with a 23 p-e for the S&P 500. Tyco is expected to earn $2.10 in calendar 1998. Tyco's fiscal year ends Sept. 30.

So he expects the stock will rise to 80 a share in a year, upping the p-e to 26. Davenport gives credit to Tyco management, led by CEO Dennis Kozlowski—who, he notes, has assembled a string of businesses with strong growth potential: With the help of acquisitions, Tyco sales have surged from $2.8 billion in 1992, when Kozlowski took over, to an estimated $12.5 billion this year and $16.5 billion in 1999.

Tyco, whose businesses include disposable medical products, undersea cables, and fire-protection and security services, is looking at further buys, says Davenport, that will boost earnings "immediately." Kozlowski says nothing is imminent, "but we're eyeing a nu of companies in our core business

WAVEPHORE POPS UP IN WINDOWS 9

Unlike Yahoo! Lycos, scape, and America Online, Internet stocks have not gone th the roof. One that may be und preciated is WavePhore (WAVO), veloper of low-cost, high-speed sy for distributing data over existin radio, satellite, and Internet i structures. Microsoft started b shares in November, 1997, and owns 632,000 shares, or some 3.5 tel owns 2.45%.

One of WavePhore's software ucts, called WaveTop, uses TV sign deliver programming to home PC TVs, explains Joel Krasner of York's First Albany. Microsoft h corporated WaveTop as one o icons on the screen of Windows 9 Win98 becomes more widely us will WaveTop. Sales of Win9 530,000 units in its first weekend shows "considerable pent-up de for Windows 98," says Kra WavePhore's deal with CompUSA to promote WaveTop in its stores will boost sales.

Krasner expects that Microsoft will increase its stake in WavePhore, since Bill Gates likes to have a bigger say in companies he invests in, says Krasner.

He sees WavePhore turning a profit in 1999, earning $1.1 million, or 5¢ a WaveTop alone, he says, will ge sales of $23 million next year. By WaveTop sales should hit $35 m figures Krasner, which will WavePhore earn $5 million, or share. Now trading at 11 a sha stock should hit 20 in 12 month Krasner, as WavePhore's Interne ness gets more visibility.

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e S. Yip

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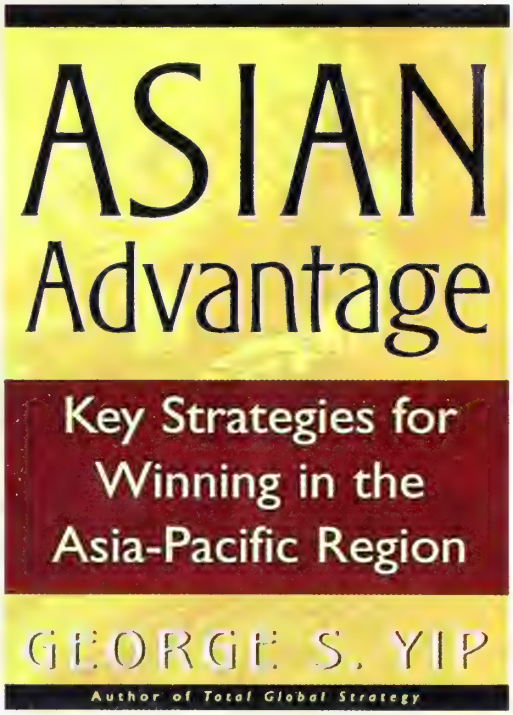

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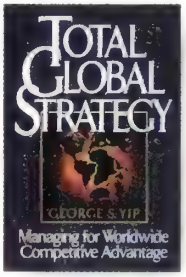

KENICHI OHMAE, Managing Director, McKinsey & Company, Inc., Japan

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ADVERTISING

GREAT AD! WHAT'S IT FOR?

In these campaigns, the point is not to name the product

Lee Company has a new style of jeans for sale, but you'd barely know it from the advertising. Since March, print and poster ads promoting Lee Dungarees have been decidedly coy. They show a doll—dressed in a variety of outfits, from cowboy to milkman. They don't say jeans. They don't say Dungarees. Or pants. Or Lee. In fact, it's pretty much impossible to tell that they're ads at all.

DOLLFACE Lee's teasers feature just the Buddy Lee doll and the tag MOA #2

And that's the point.

Lee Dungarees are getting their launch through the latest fad in marketing: the mystery campaign. These are teaser campaigns taken to new heights. Companies from movie studios to magazines are trying to break through ad clutter and grab consumer attention. Although the tactic has little track record and a few high-profile teasers have fallen flat, interest is intense among ad makers. "Anything that triggers attention is worth a try," says Gad Romann, creative director for New York-based ad agency Romann Group. "Everybody is trying to be nontraditional."

GET IT? And he does mean everybody. Trendy clothing companies are the most prevalent users of mystery marketing, but the ploy is hot across industries. Oldsmobile, a division of General Motors Corp., has employed several wordless TV ads and online campaigns to promote the Intrigue, a midsize sedan aimed at younger buyers. *Business 2.0*, a new business magazine, had rumors flying all over Silicon Valley with its cryptic billboard campaign reading simply: "Yahoo gets it," and "Amazon gets it." Foot Locker's New York ads showed the company's trademark and-white stripes, but no mention store. Reebok International Ltd. its latest ad blitz with a spate of ads showing gray-clad runners. subsequent versions did a Reebo and message appear. The caginess cial, says Brenda Goodell, Reebo president for worldwide marketi you don't engage the consumer, gloss right over your ad," she say

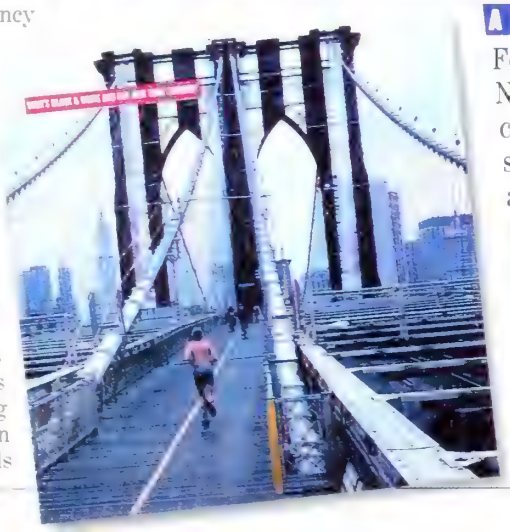
The mystery marketers have spawned a new tactic—they call postings. Borrowing a page from promoters, mar are printing up of ads in poste and getting plastered every from constructio to toll booths. antithesis of the network TV a says Robin Austin, a principal at 5, a Westport (Conn.) market re firm. "Down on street level, yo credibility," he says. "It's as imp as getting your name on 30 sec prime time."

Particularly if your target ma young, hip, Internet-savvy, and b since childhood vertising of all While baby b might get anne ads with crucia mation missi makers hope y shoppers will trigued. "You be aiming at s who is used to ternet-surfing That's the kind sumer who w figure somethi says Ann Lew rector of world vertising for Corp. The chi created a multi dollar whoduni ries for the Sup earlier this ye using online te again this m boost interes new chip, Per Xeon Processo

For Lee, th more than ju bing attention for a product lau company's research shows its ta mographic—consumers age 17 are turned off by a hard sell a to feel as though they're disc

INTRIGUED? Oldsmobile used several wordless TV and online ads for this car

A WHOZIZIT Foot Locker's New York campaign scrupulously avoids showing the chain's name



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Marketing

product. "They told us in our res
the harder you try, the more we a
going to pay attention to your b
says Dodie Subler, group director a
lon McElligott, Lee's ad agency.

MAN OF ACTION. That led to th
ation of the Buddy Lee campaign
dy Lee is a doll that was used b
as a promotional item in the 192
March, posters went up in 15
showing just the surreal-lookin
and an enigmatic piece of small
MOA #2. In May, night owls migh
caught the six-minute short fi
Comedy Central—it ran at 1 a.m.
explained the origins of Buddy L
his connection to Lee's new pr
Dungarees. It also explained tha
meant Man of Action. The idea is
just a few people in on the jok
let the ads' meaning filter out by
of mouth. "Leading-edge kids l
feel like they are in the know,
Terry Lay, president of Lee Jean

But while mystery may gener
tention, it doesn't necessarily ge
sales. "These are not the kind o
paigns that cause a consumer t
what they are doing and come rig
says Gary Yiatchos, senior vice
dent for marketing at Bon Mar
Seattle-based chain of depar
stores. "It can create brand awa
and that's good. But that impacts
long period of time. You don't see
mediate payback."

And as mystery campaigns g
ger, the risk of failure looms larg
of the biggest examples of a m
campaign, for the summer movie
la, was a monster-size miss. Son
spent an estimated $50 million or
gram that kept the full lizard fro
Teasers from billboards to movie
coming attractions hyped the m
But *Godzilla* has been a box off
appointment, and many market
perts say the mystery theme was
the problem. It overpromised, s
liott Ettenberg, CEO of Bozell Re
you build up the product that w
then it's not that good—boy, you'v
ed a lot of money, and the cons
pissed off," he says. "To say tha
against you is an understatemen

Even so, few seem scared
Godzilla's stumble. Lee riva
Strauss & Co. is considering
proach for its Red Line brand.
says he's looking into the tactic
online stock-trading outfit DLJ
"The consumer gets 300 ad mes
day. You have to be willing to ta
to make an impression," says F
Even one that doesn't make sen

By Ellen Neuborne in N

COMMENTARY

By Lorraine Woellert

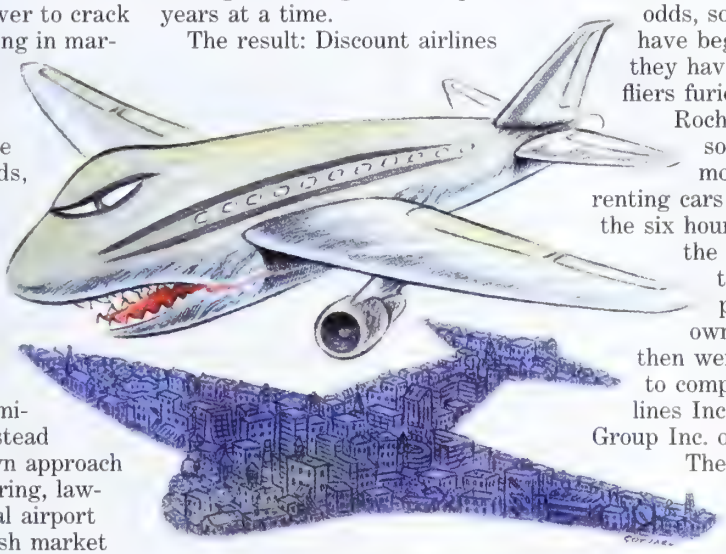
SKY-HIGH AIRFARES: HOW TO BRING THEM DOWN

ith airfares escalating at dou-ble-digit rates, Washington is wrestling with a controver-lan that, in theory, might low-ket prices again. A bill on ol Hill would give the Trans-tion Dept. new power to crack on predatory pricing in mar-where airlines near-monopolies. he measure has big carriers, set the e and Senate at odds, ivided consumer s, which can't e whether rereg-n would really ir travelers. re may, however, ther way to stim-competition in an ry increasingly domi-by six airlines. Instead awkward, top-down approach ongress is considering, law-s should enlist local airport ities to help unleash market

With a little encouragement, authorities could wield ndous power. Congress could y lifting the $3 cap on airport fees.

OGS. At first blush, raising prices to bring down fares absurd. But since 1991, air-ave had the power to ear-icket surcharges for new con-on. A dollar increase in the rports are allowed to charge provide up to $400 million a new funding nationwide. authorities could use the to expand facilities for itors—a small step that give discount carriers a d at airports now domi-by a single carrier. the past two decades, lines have woven ob-onist webs around major s, particularly at critical And local officials have them. In their zeal to xpensive new facilities et a demand for air trav-is expected to add some llion passengers during t seven years, cities and towns have turned to the big carriers to help finance construction. But by doing so, they have signed away control, ceding airlines a major say in airport operations—in some cases, leasing all their gates for up to 20 years at a time.

The result: Discount airlines often pay a 100% to 200% premium each time they use a gate—if they can get access at all. They are also at the mercy of competitors, who can order schedule changes, impose delays, and force evictions at any time. Smaller carriers often have to add 20 minutes to flight time to account for what have become routine gate snafus or delays caused by air traffic control giving precedence to big carriers that call the shots at their airport. "We'll sometimes be sent way around Timbuktu to get into the airport," says Jason M. Rhen, director of market planning for Eastwind Airlines Inc. in Greensboro, N. C.



But even against such daunting odds, some community airports have begun to fight back. And they have support from business fliers furious over high fares. In Rochester, N. Y., things are so bad that Delphi Automotive Systems has been renting cars to shuttle executives the six hours to Detroit to sidestep the $800 airfare. So when the Rochester airport expanded, it built a county-owned gate, and officials then went shopping for a carrier to compete with United Airlines Inc. and US Airways Group Inc. on the busiest routes. They landed Eastwind, which will launch its low-fare service on Aug. 1.

At Chicago's O'Hare International Airport, Chicago Aviation Dept. Commissioner Mary Rose Loney last month broke United's lock on its terminal by using ticket fees to build five new gates. United will get to use the spots, but the airline has to share time with other carriers because federal law prohibits ticket fees from being spent on construction that will benefit a single user. Still, the expansion creates room at Chicago for another carrier—and the city is wooing one now. "If you can successfully negotiate a deal in a major hub like Chicago, other airports can do it, too," Loney says.

In all, more than 120 communities are pleading with new airlines to service their airports, reports the Business Travel Coalition. Before Congress starts down the road to reregulation, it might consider helping these potential allies find a solution to predatory pricing at the grass roots.

Woellert covers the airline industry from Washington.

Gouging Passengers?

Fares from airports dominated by a single carrier are generally much higher per passenger mile than those from airports where several airlines closely compete

AIRPORT	DOMINANT CARRIER	PERCENT OF MARKET	REVENUE PER PASSENGER MILE*
PITTSBURGH	US AIRWAYS	81%	92¢
ATLANTA	DELTA	80	68¢

AIRPORT	ONE OF SEVERAL CARRIERS	PERCENT OF MARKET	REVENUE PER PASSENGER MILE*
ORLANDO	DELTA	32%	37¢
LAS VEGAS	SOUTHWEST	30	25.5¢

*For flights of similar distance

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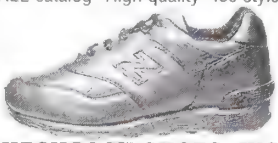

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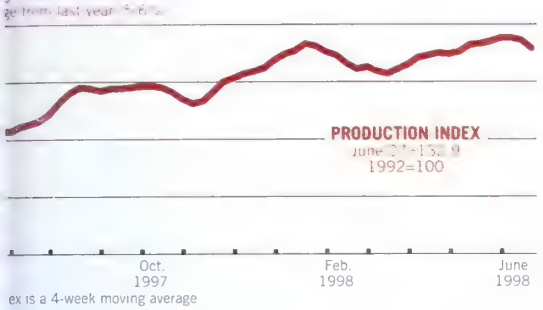
siness Week Index

UCTION INDEX

ge from last week: –0.5%
ge from last year: +6.7%



ex is a 4-week moving average

uction index fell during the week ended on June 27. The unaveraged pped to 131.0, from 132.3. Each fall reflects steep declines in r adjusted auto and truck production, a result of the ongoing strike l Motors Corp. The work stoppage probably also contributed to a teel output. Elsewhere, production of electric power, coal, lumber, reight traffic increased. For the month of June, the index slipped to om 133.5 in May.

, 1998, The McGraw-Hill Companies

NG INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
RICES (7/3) S&P 500	1146.42	1133.20	25.0
ATE BOND YIELD, Aaa (7/3)	6.51%	6.53%	–11.4
UPPLY, M2 (6/22) billions	$4,195.7	$4,192.7r	7.4
LAIMS, UNEMPLOYMENT (6/27) thous	390	366r	16.1
E APPLICATIONS, PURCHASE (7/3)	286.4	241.3	28.2
E APPLICATIONS, REFINANCE (7/3)	1,470.6	1,202.7	254.7

Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage sn. (Index: March 16, 1990=100)

EST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
FUNDS (7/7)	5.46%	7.06%	5.46%
CIAL PAPER (7/7) 3-month	5.50	5.51	5.58
ATES OF DEPOSIT (7/8) 3-month	5.58	5.60	5.60
RTGAGE (7/3) 30-year	7.08	7.07	7.83
BLE MORTGAGE (7/3) one-year	5.81	5.78	5.85
3)	8.50	8.50	8.50

Federal Reserve, HSH Associates, Bloomberg Financial Markets

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (7/4) thous. of net tons	1,968	1,888#	–5.2
AUTOS (7/4) units	11,092	82,463r#	47.0
TRUCKS (7/4) units	27,317	93,326r#	55.0
ELECTRIC POWER (7/4) millions of kilowatt-hrs.	72,841	77,400#	4.8
CRUDE-OIL REFINING (7/4) thous. of bbl./day	15,274	15,333#	3.5
COAL (6/27) thous. of net tons	21,041#	20,689	0.7
LUMBER (6/27) millions of ft.	485.5#	486.0	–4.5
RAIL FREIGHT (6/27) billions of ton-miles	26.9#	26.8	1.9

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPA1, SFPA2, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (7/8) $/troy oz.	292.000	296.800	–8.0
STEEL SCRAP (7/7) #1 heavy, $/ton	135.50	135.50	–2.2
COPPER (7/3) ¢/lb.	76.4	78.2	–34.5
ALUMINUM (7/3) ¢/lb	63.0	63.8	–17.1
COTTON (7/4) strict low middling 1-1/16 in., ¢/lb	77.09	75.55	6.9
OIL (7/7) $/bbl.	13.53	14.05	–30.0
CRB FOODSTUFFS (7/7) 1967=100	235.21	233.81	–0.1
CRB RAW INDUSTRIALS (7/7) 1967=100	294.53	296.20	–11.4

Sources: London Wednesday final setting, Chicago market, *Metals Week*, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (7/8)	139.45	138.28	112.82
GERMAN MARK (7/8)	1.82	1.82	1.76
BRITISH POUND (7/8)	1.64	1.66	1.69
FRENCH FRANC (7/8)	6.09	6.10	5.95
ITALIAN LIRA (7/8)	1790.5	1790.2	1717.8
CANADIAN DOLLAR (7/8)	1.47	1.46	1.37
MEXICAN PESO (7/8)	8.920	8.941	7.885
TRADE-WEIGHTED DOLLAR INDEX (7/8)	113.9	113.3	103.2

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

E WEEK AHEAD

ER PRICE INDEX

July 14, 8:30 a.m.EDT ▶ Con- ces probably rose 0.2% in June, to the median forecast of econo- eyed by Standard & Poor's MMS, a e McGraw-Hill Companies. food and energy, core prices like- ed 0.2% as well. In May, total e 0.3%, while core prices 0.2%. Overall consumer inflation nain below 2% this year, but core o far in 1998 is picking up from pace in 1997.

ALES

July 14, 8:30 a.m.EDT ▶ Retail ably edged up 0.1% in June, says the S&P MMS forecast. Excluding vehicle purchases, sales probably increased 0.2%. Store receipts rose at a much stronger pace in May: Total sales jumped 0.9%, while nonauto purchases advanced by 0.4%.

BUSINESS INVENTORIES

Wednesday, July 15, 8:30 a.m.EDT ▶ Inventories held by manufacturers, wholesalers, and retailers most likely edged up 0.2% in May, the same small gain as in April. Factories already have reported a slim 0.1% rise in stock levels. Business sales probably rose 0.2% in May, after falling 0.1% in April. Inventory growth was a large contributor to economic growth in the first quarter, but stock levels probably grew more slowly in the second quarter.

INDUSTRIAL PRODUCTION

Thursday, July 16, 9:15 a.m.EDT ▶ Industrial output probably fell 0.4% in June after rising 0.5% in May, says the S&P MMS median forecast. That's suggested by a drop in factory jobs as well as by production lost in the strike at General Motors Corp. Operating rates most likely averaged 81.6% in June, down from 82.2% in May.

INTERNATIONAL TRADE

Friday, July 17, 8:30 a.m.EDT ▶ The foreign trade deficit for goods and services in May probably changed little from the $14.5 billion posted in April. Exports, which fell 2.6% in April, probably rebounded in May, as did imports, which slipped 0.9% in April.

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BusinessWeek ONLINE

Sunday

Michael Silberman tells how his Retrospettiva became No. 16 on BW's list of Hot Growth Companies. **July 12**
9 p.m. EDT

Monday

Where to live when you retire? Ask David Savageau, author of *Retirement Places Rated*. **July 13**
8 p.m. EDT

Tuesday

Market chat with S&P analyst Kevin Gooley, all about technology stocks. **July 14**
4:30 p.m. EDT

Thursday

Join the hot debate over the future of Social Security, with expert Martha Priddy Patterson from KPMG Peat Marwick. **July 16**
9 p.m. EDT

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estment Figures of the Week

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DO
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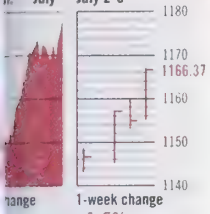


nange 1-week change
+1.6%

NTARY

rtain week in the fi- narkets turned spright- the most encouraging on July 8. Both the l & Poor's 500-stock nd the NASDAQ com- se to record highs on e. Travelers Corp. and led the list of gain- d a surge in Intel ie NASDAQ. Meanwhile, Jones industrial av- se 90 points to 9175, its all-time high. The mbed against the yen, Japanese Prime Min- led to elaborate on cut taxes.

U.S. MARKETS	Latest	% change Week	Year
Dow Jones Industrials	9175.0	1.4	17.0
NASDAQ Combined Composite	1935.4	1.1	30.2
S&P MidCap 400	369.6	1.1	25.5
S&P SmallCap 600	193.7	0.4	18.6
S&P SuperComposite 1500	246.3	0.8	27.0

SECTORS	Latest	% change Week	Year
Bloomberg Information Age	358.9	0.9	29.0
S&P Financials	145.7	4.8	41.4
S&P Utilities	245.3	–1.0	22.6
PSE Technology	356.1	1.7	18.0

FOREIGN MARKETS	Latest	% change Week	Year
London (FT-SE 100)	6009.6	1.5	26.2
Frankfurt (DAX)	6013.1	1.8	48.3
Tokyo (NIKKEI 225)	16,531.0	1.0	–16.1
Hong Kong (Hang Seng)	8629.2	1.0	–41.3
Toronto (TSE 300)	7451.3	1.1	13.3
Mexico City (IPC)	4573.3	3.4	–5.4

FUNDAMENTALS	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.36%	1.38%	1.63%
S&P 500 P/E Ratio (Last 12 mos.)	27.6	27.1	23.3
S&P 500 P/E Ratio (Next 12 mos.)*	22.1	21.9	18.6
First Call Earnings Surprise*	7.50%	NA%	4.01%

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 200-day average	1027.0	1022.7	Positive
Stocks above 200-day average	51.0%	48.0%	Neutral
Options: Put/call ratio	0.49	0.50	Negative
Insiders: Vickers Sell/buy ratio	1.99	2.05	Positive

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS	Last month %		Last 12 months %
Homebuilding	19.8	Specialty Appar. Retailers	114.5
Computer Software	18.0	Broadcasting	91.6
Broadcasting	14.6	Homebuilding	90.3
Communications Equip.	14.3	Automobiles	78.9
Drug Chains	13.8	Airlines	78.0

WORST-PERFORMING GROUPS	Last month %		Last 12 months %
Machine Tools	–18.4	Metals	–45.0
Oil & Gas Drilling	–15.3	Oil & Gas Drilling	–33.1
Metals	–10.6	Engineering & Constr.	–22.7
Oil-Well Equip. & Svcs.	–10.2	Gold Mining	–21.5
Leisure Time	–9.8	Hospital Management	–20.9

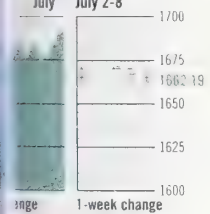
BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness	Price	1-month change
IBM	113 7/8	–4 15/16
Berkshire Hathaway-A	77,775	–225
AT&T	56 3/16	–5 11/16
J.P. Morgan	122 11/16	–1
BellSouth	66 7/16	–3/8
Berkshire Hathaway-B	2598	–12

Decline ahead? Stocks with most significant selling on price strength	Price	1-month change
WorldCom	50 3/8	5 1/2
Microsoft	107 15/16	22 1/4
Cisco Systems	92 3/4	15 1/4
Intel	75 1/8	5 13/16
Dell Computer	91	7 5/16
Qwest Communications Intl.	37 7/16	4 15/16

ST RATES

IRY BOND INDEX
July July 2-8



nge 1-week change
0.0%

nberg Financial Markets

KEY RATES	Latest week%	Week ago%	Year ago%
MONEY MARKET FUNDS	5.11	5.10	5.17
90-DAY TREASURY BILLS	5.07	5.10	5.11
6-MONTH BANK CDS	5.03	5.05	5.18
1-YEAR TREASURY BILLS	5.32	5.38	5.53
10-YEAR TREASURY NOTES	5.43	5.44	6.25
30-YEAR TREASURY BONDS	5.62	5.62	6.56
LONG-TERM AA INDUSTRIALS	6.24	6.23	7.02
LONG-TERM BBB INDUSTRIALS	6.73	6.73	7.40
LONG-TERM AA TELEPHONES	6.63	6.61	7.31

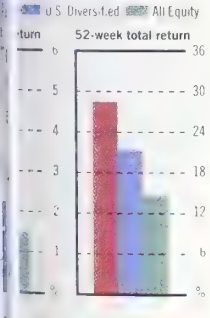
BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond Latest week	10-yr. bond Last week	30-yr. bond Latest week	30-yr. bond Last week
GENERAL OBLIGATIONS	4.39%	4.39%	4.93%	4.95%
PERCENT OF TREASURIES	80.95	80.88	87.70	87.99
TAXABLE EQUIVALENT	6.36	6.36	7.14	7.17
INSURED REVENUE BONDS	4.56	4.56	5.16	5.18
PERCENT OF TREASURIES	84.08	84.01	91.79	92.07
TAXABLE EQUIVALENT	6.61	6.61	7.48	7.51

L FUNDS

U.S. Diversified All Equity
turn 52-week total return



ngstar, Inc.

EQUITY FUNDS

Leaders Four-week total return	%	Laggards Four-week total return	%
ProFunds UltraOTC Investor	20.4	Lexington Troika Russia	–27.2
DFA Japanese Small Co.	14.1	Guinness Flgt. Asia Sm. Cap	–11.3
Amerindo Technology D	13.6	Fidelity Sel. Energy Serv.	–11.1
Transamerica Prem. Sm. Co.	12.9	Potomac OTC/Short	–9.9
Potomac OTC Plus	12.7	GMO Emerging Markets III	–9.6

Leaders 52-week total return	%	Laggards 52-week total return	%
Transamerica Prem. Sm. Co.	77.5	Matthews Korea I	–66.8
Transamerica Prem. Ag. Gr.	75.6	Lexington Troika Russia	–66.8
Weitz Hickory	63.3	Lex. Crosby Sm. Cap Asia	–64.4
Fidelity Select Brokerage	60.1	Montgomery Emerg. Asia R	–63.2
Fidelity Select Retailing	53.9	Guinness Flgt. Asia Sm. Cap	–62.6

EQUITY FUND CATEGORIES

Leaders Four-week total return	%	Laggards Four-week total return	%
Large-cap Growth	5.6	Diversified Emerging Mkts.	–4.9
Communications	5.4	Natural Resources	–3.4
Japan	4.8	Latin America	–3.2
Technology	3.9	Precious Metals	–3.0
Mid-cap Growth	3.8	Pacific/Asia ex-Japan	–2.3

Leaders 52-week total return	%	Laggards 52-week total return	%
Communications	36.5	Pacific/Asia ex-Japan	–52.3
Financial	34.5	Diversified Pacific/Asia	–39.9
Large-cap Growth	29.8	Diversified Emerging Mkts.	–32.9
Europe	27.6	Precious Metals	–27.3
Unaligned	25.0	Latin America	–24.3

of market close Wednesday, July 8, 1998, unless otherwise indicated. Industry groups 00 companies only. Fundamentals, technical indicators, Bloomberg money flow analysis, and mutual fund returns are as of July 7. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

GET READY FOR THE SLOWDOWN

Americans may be forgiven their self-satisfaction in these long, hot summer days. Unemployment is low, real incomes are rising, and the stock market is increasing the wealth of millions. But it may be time to take a break from the barbecue and beach routine for a reality check. The global economy is downshifting from fast to slow growth, with the U.S. no exception. Yet fiscal and monetary policy remain tight just about everywhere. Unless policymakers begin to ease up, there could be economic trouble ahead.

A run of recent surprises makes for a darkening economic outlook. In the U.S., growth is slowing more sharply than anticipated, from a 5.4% annual rate in the first quarter down to a pace of zero to 2% in the second. The Asian crisis is finally hitting hard, striking at both exports and corporate profits. Inventory accumulation is at a record high, manufacturers are cutting back, and the high-tech sector, especially chips, is being slammed. Job growth is slowing. The General Motors Corp. strike is a wild card that could do serious harm.

Europe, once expected to pick up the slack when the U.S. tuckered out, is rolling over, too. The Bank of England recently raised interest rates as the British economy weakened. The surge in sterling has already sent manufacturing into recession. First-quarter growth of 2.5% was probably cut in half in the second and may turn negative in 1999. On the Continent, where economies were supposed to be in liftoff, growth has fallen from 3.2% in the first quarter to 1.5% in the second. The Asian crisis played a major role, but Germany contributed by committing a fiscal *faux pas*, raising the sales tax just as consumers were beginning to open their pocketbooks, hurting demand. The prospect of Chancellor Helmut Kohl and his conservatives being replaced by a Social Democratic-Green coalition in September is cooling investment, a

The surprise out of Asia is how bad it is. Japan's gr mestic product has had its biggest three-quarter cont since the war, with 1997's fourth quarter down an annu of 1.5%, first quarter 1998 down 5.3%, and the second off 3.5%. *Kureditor kurunchie*, or credit crunch, is now Japanese vernacular. By U.S. or European measureme employment is probably well over 5% and rising fast. T est bank-reform package is ambiguous, and Tokyo ke versing itself on a permanent tax cut to stimulate sp

The rest of Asia is in worse shape. Indonesia's ec could contract by one-third this year. The economies o and Thailand could shrink by 10%. China's growth is s and pressure to devalue the renminbi by 10% to 20% creasing. Devaluation fever is spreading to Brazil and It has already sent the South African rand down by

Despite evidence of a slowdown in global economic g policy remains tight. It may be that declining U.S. bon higher European employment, and massive Japanese priming will brake this unexpected slide in growth months ahead. But caution argues that policy should b ing now to ensure it. The IMF should allow its Asian w lower interest rates and spend more. Germany should g way out of deficit, not tax itself back into stagnati Bank of England should back off from further tighteni Washington should return much of the upcoming $70 bil eral budget surplus to the consumer in the form of a t As for the Federal Reserve, it now effectively makes m policy for the world. By not hiking rates very much, it r amazing acuity in the years of high economic growth. must show the same kind of insight as growth sudden s

MORE CHOICES FOR RETIRING BOOMERS

Remember that old question, "What are you going to do when you grow up?" Well, for aging baby boomers it has morphed into, "What are you going to do when you retire?" As 77 million boomers begin to march across the 50-year-old line, they are facing two choices that will define the rest of their lives. Some want to retire early and have fun; others want to work well into their golden years. Both groups are motivated by the same happy circumstance—people are living longer and staying healthier. But the financial planning appropriate for each retirement goal is very different.

Take the working retirees. A BUSINESS WEEK poll in the Annual Guide to Retirement (page 88) shows that 75% of all baby boomers expect to continue working after they retire. Some want to work or do consulting in their former occupation, others in a different field. About 10% want to start their own business. For them, retirement means an income stream, so the classic portfolio switch from stocks to bonds is out. Retiring later allows for greater portf over a longer period of time. Luckily, there are p Web sites, software programs, and advisers to hel the mix.

These same digital guides can plan for years of Two factors are allowing people to quit the working ly—inheritance and the stock market. Some $1 trilli heritance money stands to rain down on lucky Thanks to parents who cashed out of their houses i flationary '70s, invested in the stock boom of the '80s and left most of it behind, millions of boomers are ge chance to golf, fish, or play tennis full-time in their there are others whose modest retirement investm looned in the same bull market. These folks need a f asset mix for the next 20 or 30 years.

So for those who can begin to handle the reality ing old, it's time to do some homework. Here's a way

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BusinessWeek

1998 A PUBLICATION OF THE McGRAW-HILL COMPANIES $3.95

Thanks to bioengineering, scientists will soon be able to grow body parts–from hearts and livers to skin and blood vessels

BIOTECH BODIES

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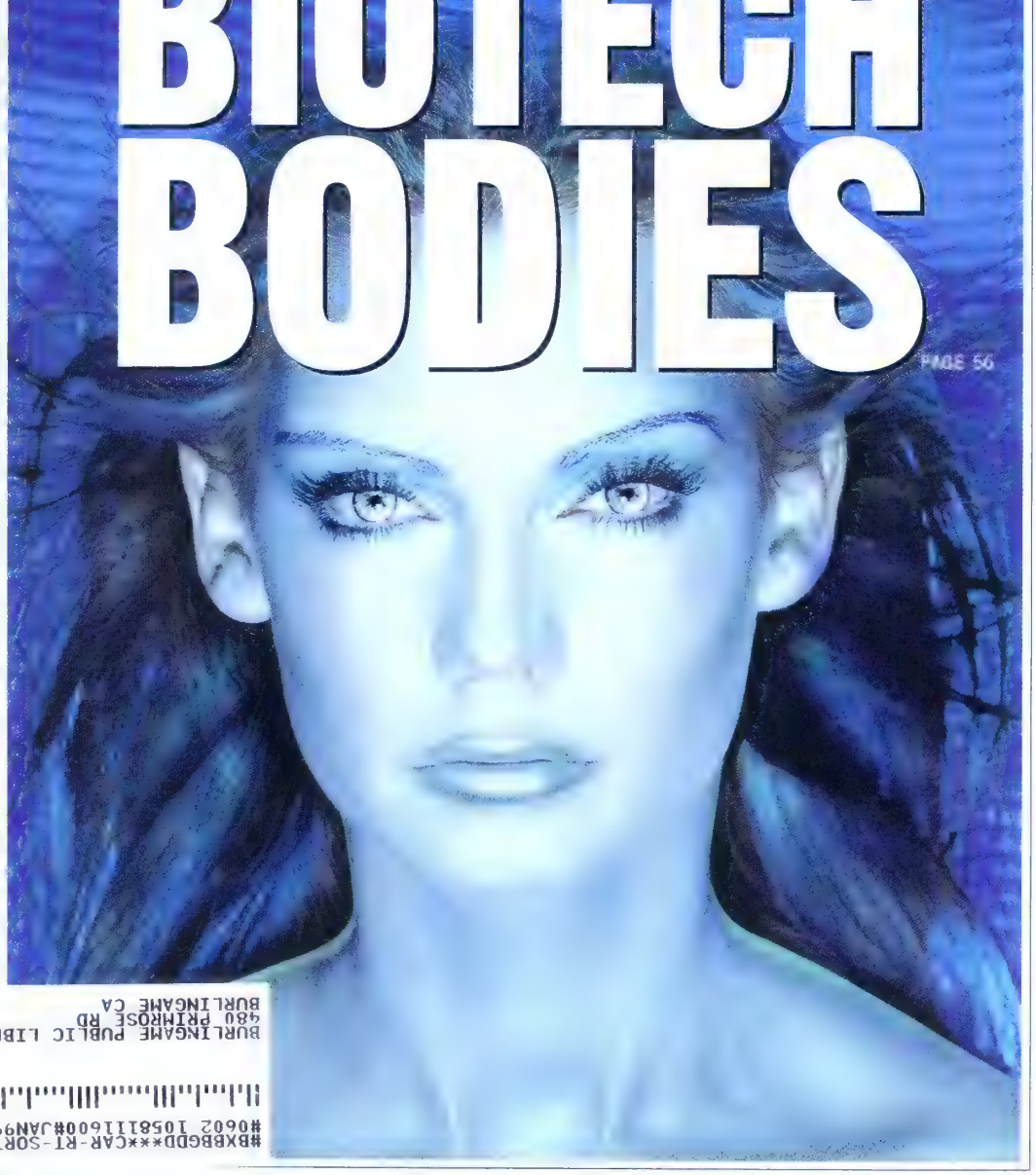

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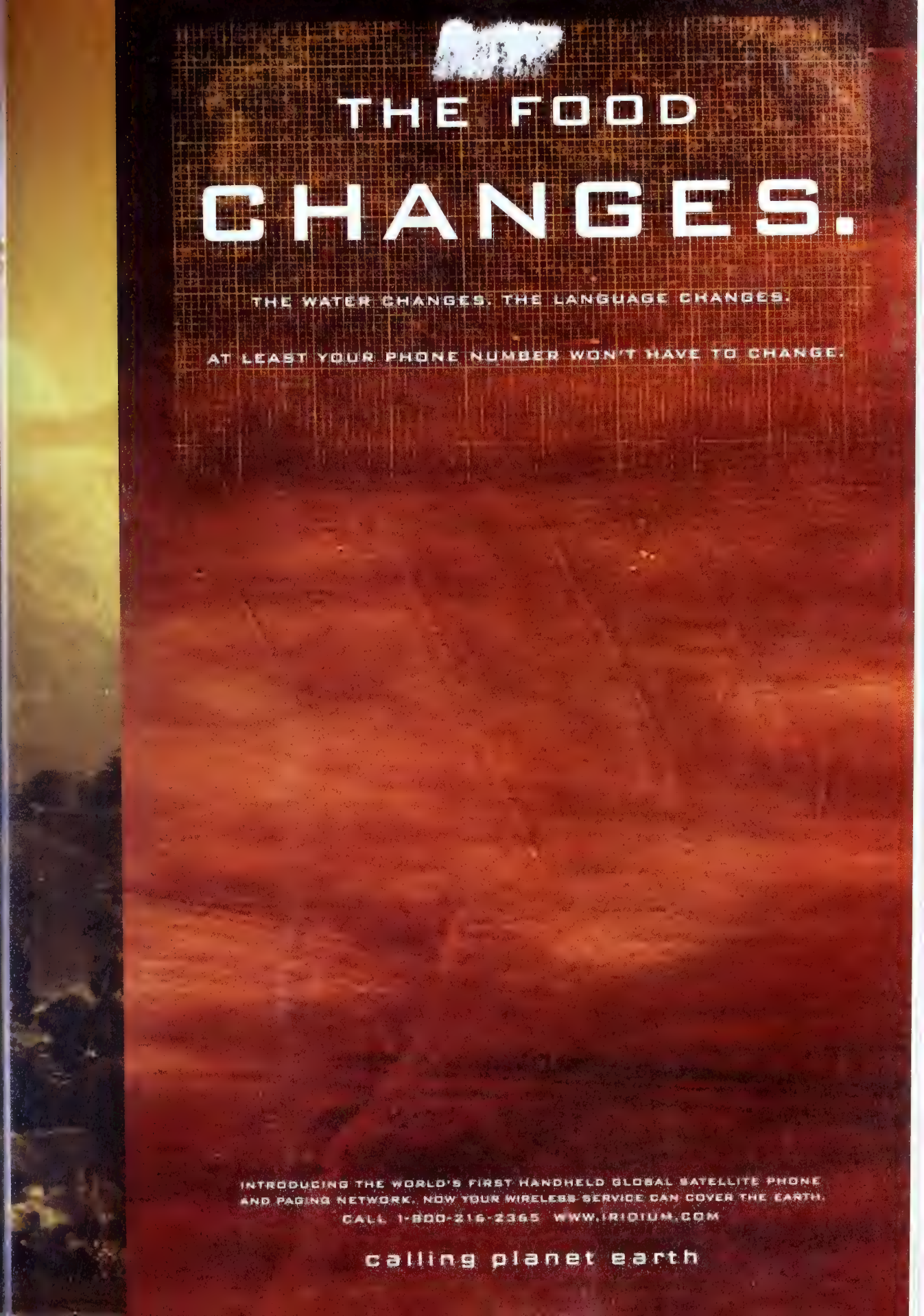
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COVER STORY

BIOTECH BODIES

Cue the organ music: Tissue engineering is here, and patients are starting to profit from spare parts. Investors will be next

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CHARGE!

Big banks may revolt against Visa and MasterCard

page 68

BusinessWeek

JULY 27, 1998

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After some 20 years of studying the processes by which cells grow, tissue engineering is ready for prime time. Regenerated or man-made skin, blood vessels, and cartilage are all being tested in humans. Livers, hearts, and ears are taking shape in the lab. While it may take a decade or more for some of these investments to pay off, dozens of tiny startups are preparing commercial products, and big drug companies are beginning to take notice

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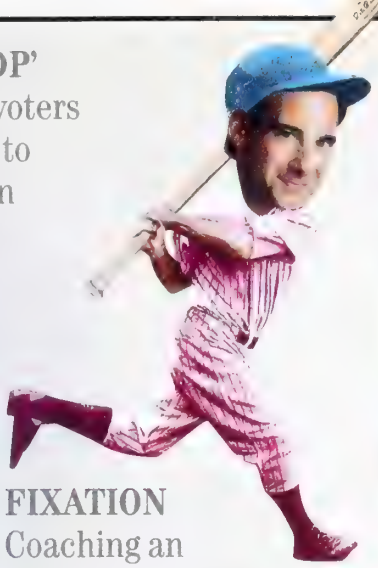

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Up Front

EDITED BY ROBERT McNATT

TALK SHOW "At heart, this victory showed solidarit cohesion, and showed that France had a soul or, more cisely, was trying to find one."

—President Jacques Chirac, on France's World Cup win

PHONE WARS

DROPPING A DIME ON MCI

SOME PHONE CUSTOMERS looking for low long-distance rates under a new MCI program have found themselves paying a lot more than they expected. Last November, MCI Communications launched its heavily advertised "10-321" long-distance service, offering customers discounts as high as 50% off rival AT&T's basic rates—without switching carriers. Callers get the low rate by dialing the prefix first.

PUSH: *Costly ad campaign*

But an embarrassing glitch has resulted in hundreds of consumer complaints. Some callers using 10-321 are billed at the highest MCI rates of about 40¢ a minute. MCI's 10-321 rates, on the other hand, are as low as 6.5¢ a minute. Because of a technical snafu, says MCI, 50 Bell Atlantic and 27 Ameritech switching offices, among others, failed to distinguish 10-321 calls from regular MCI calls. The Bells say the problem is the way MCI configured the service and that they warned MCI about potential snags. MCI complains they did not but is working with the Bells to correct the problem. It has also reimbursed consumers for mistaken charges.

Still, that's not good enough for some folks. On June 23, a Philadelphia resident filed a class action suit against MCI for overcharges, fast on the heels of another one accusing MCI of racketeering. Some people just get testy over 40¢-a-minute calls. *Catherine Yang*

INVESTORS

DLJ BRINGS OUT THE BIG GUNS

THE FOLKS WHO BROUGHT YOU defense-industry merger mania don't think it's over—and now hope to make a pretty penny off it. A group of high-powered Pentagon ex-officials have formed Global Technology Partners (GTP) to advise Donaldson, Lufkin & Jenrette's $8 billion merchant banking operation on equity investments and deals in defense and technology. GTP, which also will invest in and advise companies it helps bankroll, includes former Defense Secretary William Perry and former Deputy Defense Secretary and CIA Director John Deutch.

Another former deputy defense secretary and GTP partner, John White, says the three-month-old part will rake in advisory f "the real attraction the opportunity to Ethics rules bar the officials from using P contacts to grease de they will parlay their knowledge to check o tech outfits and seco third-tier defense fir and abroad.

The group hasn't m investments yet. But adds that DLJ will c the venture a succe just a handful of dea year. *Stay*

PERRY: *For the defen*

EMBASSY ROW

KOREA'S GARDEN IS A REAL GAS

IT WAS JUST LAST YEAR THAT the Republic of Korea spruced up its embassy grounds in Washington's tony Spring Valley neighborhood, adding a fish pond, footpath, and ornamental rocks. But Ambassador Kun Woo Park's staff had better not dig too deep in the embassy garden. Under the flowers near the embassy sits a cache of mustard gas left over from World War I.

The embassy is located on a smallish 50-year-old dump site—nicknamed the "Hades Pit"—that once belonged to the U.S. Army's Chemical Warfare Service and was used for small-scale weapons testing. The Army conducted a massive five years ago, but a community group fo city to take a secon and more gas was fo

So this winter, th Corps of Engineers up the WWI musta and a lethal chemica called lewisite—which like geraniums. Th won't hurt anyone as it's undisturbed, gineers. Still, trieval won't s til cold wea is safer it the waiti won't l the en fall soci son. After Ambassador's might like t the geranium they can. *Lorraine*

BURIED: *Deep trouble*

THE LIST TEAMS WORTH CHEERING FOR

What does it take to be a "fan-friendly" baseball club? Cheap eats and good seats help. Selling off your best players doesn't. Of the 30 teams in Major League Baseball, the United Sports Fans of America rate these the four best and the four worst:

HUIZENGA: *Fire sale*

THE WINNERS

DETROIT TIGERS Fireworks displays, Autograph Thursdays

CINCINNATI REDS Tickets average only $8.37

CLEVELAND INDIANS A family of four eats for only $30

LOS ANGELES DODGERS The $37 family food package; free baseball cards

THE LOSERS

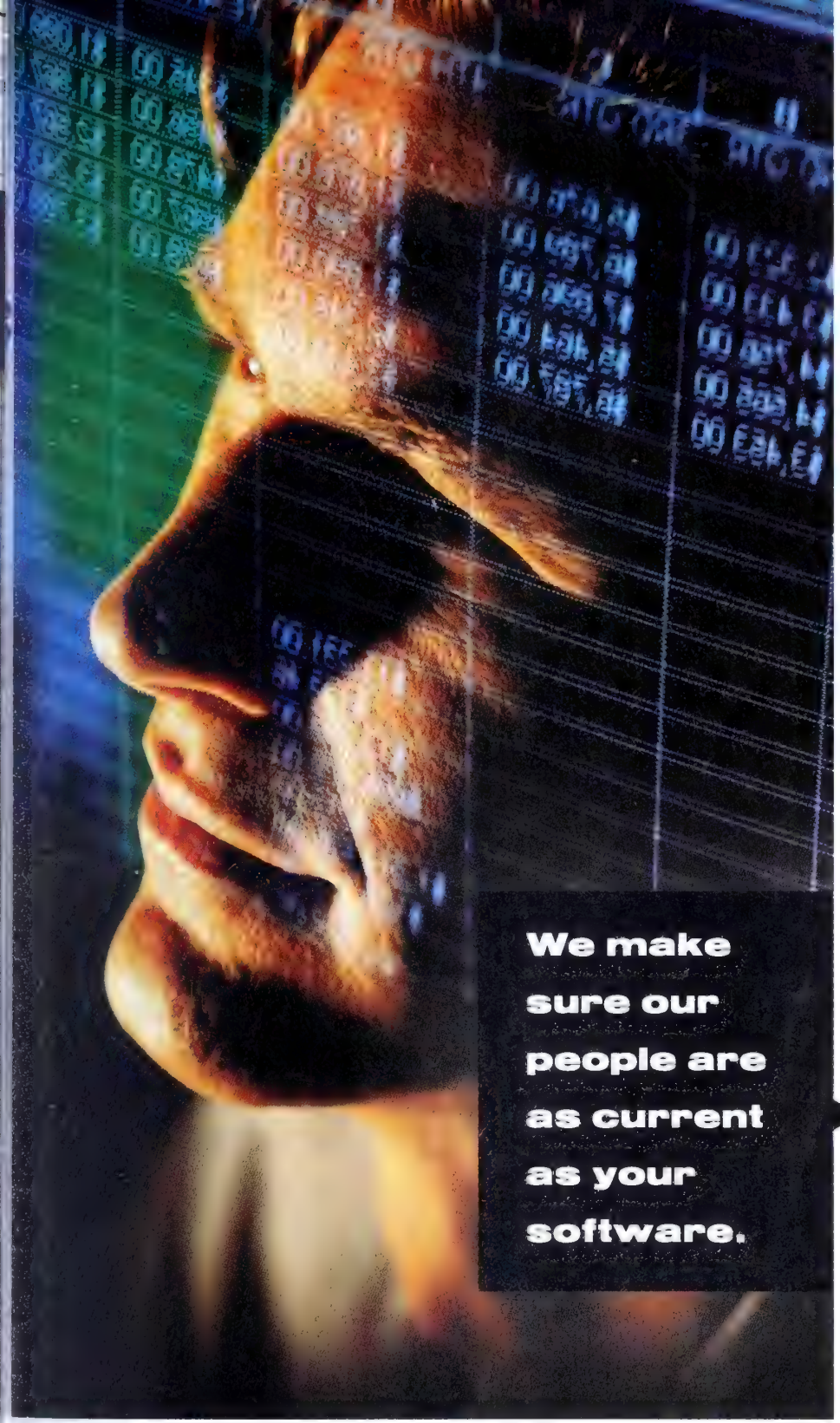
FLORIDA MARLINS Owner Wayne Huizenga dismantled World Series champions

CHICAGO CUBS Tickets discounts are scarcer than hens' teeth

NEW YORK YANKEES Stingy discounts on food and other items

ATLANTA BRAVES Discount seats are in the nosebleed section

DATA: UNITED SPORTS FANS OF AMERICA



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Up Front

MORALE SQUAD

MAYBE AL DUNLAP HAD THE RIGHT IDEA

IT'S OFFICIAL: IN AMERICA, nice guys do finish last. Results of a recent psychological survey of 3,600 U.S. and European executives found that those in the U.S. who rated high for being "agreeable" made less money than their mean-spirited counterparts.

How much less? On a scale of 1 to 60, U.S. execs averaged 44 for being agreeable. For every five points above that, their salary loss totaled $16,836. Nice guys with problems fared even worse. The survey, a personality test administered by Cornell University and headhunters Ray & Berndtson, also tested for "neuroticism." It found that for every five points above the mean for that trait, the U.S. group earned $15,756 less.

Using the same five-point measure, Europeans fared better, losing a lot less for being nice ($6,641) or neurotic ($3,550). They were also rewarded for extroversion, with the outgoing types making $12,046 more, vs. a measly $1,206 for U.S. managers.

U.S. business has always been driven by new ideas, says Paul Ray, Ray & Berndtson's president. "We are not a business culture that is looking for people that 'go along to get along.'"

So, if you're a glad-handing manager with a heart of gold who has been in therapy longer than Woody Allen, stop worrying about your salary—and think emigration instead. *Joan Oleck*

UNCOMMON MARKET

EUROPE'S CHAMP OF CORPORATE PORK

WHAT EUROPEAN COUNTRY subsidizes industry the most? If you think it's dirigiste France, where the state plays a major role in the economy,

you would be wrong. Actually, supposedly market-oriented Germany is the champ.

A recent European Commission study shows that Germany, the largest Continental economy, pays an average of $18 billion a year to prop up unprofitable manufacturers. Meanwhile, France, tied for second-largest with the U.K., doles out only $4 billion.

So what's the problem in the Fatherland? "Germany is rich, so it has a lot of money to waste," quips Stefan Rating, an EC spokesman. In fact, Germans pay heavily to save jobs in inefficient factories in the former East Germany. At Chemtech Leuna, for example, the state paid a one-time subsidy of $600,000 per worker to keep the plant open.

Western Germany also coddles business: A miner's job costs the state $53,000 annually. Such subsidies are widespread, says Gerd Habermann of the UNI Economics Institute in Bonn, who fears Germans are addicted to them. In economics, maybe the Germans should just become a bit more like the French. *William Echikson*

DRAWN & QUARTERED

SPORTS BIZ

A BABY STEP FOR AN NBA WANNABE

O.K., SO IT WOULDN'T EVEN cover Michael Jordan's salary for 10 minutes. But the $57,516 profit—2¢ per share—announced for last season by the publicly traded U.S. Basketball League has Commissioner Daniel Meisenheimer III psyched. "I don't mind patting myself on the back," he says. "We've been around 13 years. We've turned the corner." Lockouts, he'll leave to the NBA.

The 12-team USBL, a summer league that spawned such NBA stars as Anthony Mason of the Charlotte Hornets, has mostly lost money since its 1996 IPO, at $4 a share. It has actually dipped as low as $1—but now between $2 and $3.

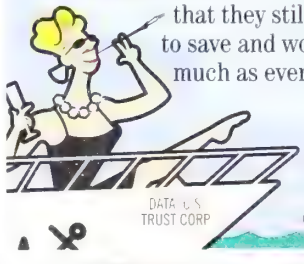
Meisenheimer is opt about the USBL. But Peter Russ, at Laidla set Management, sa USBL depends too m selling franchises for sion. Sports stocks ha erally foundered, Rus except for the NHL Panthers, which buoyed by the c tus of owner Huizenga. So wh to own sports Says Russ: " who at cockta ties want to own a piece Boston Ce *Joa*

MASON: *USBL alu*

THE BIG PICTURE

WORKSTYLES OF THE RICH AND FAMOU

What a deal. Cashing in on the bull market is allowing the rich to enjoy more comfort. But despite their hard-won affluence, the wealthy aren't taking it easy. Most feel that they still have to save and work as much as ever.



"THE MONEY I'VE MADE IN TH MARKET HAS CAUSED ME

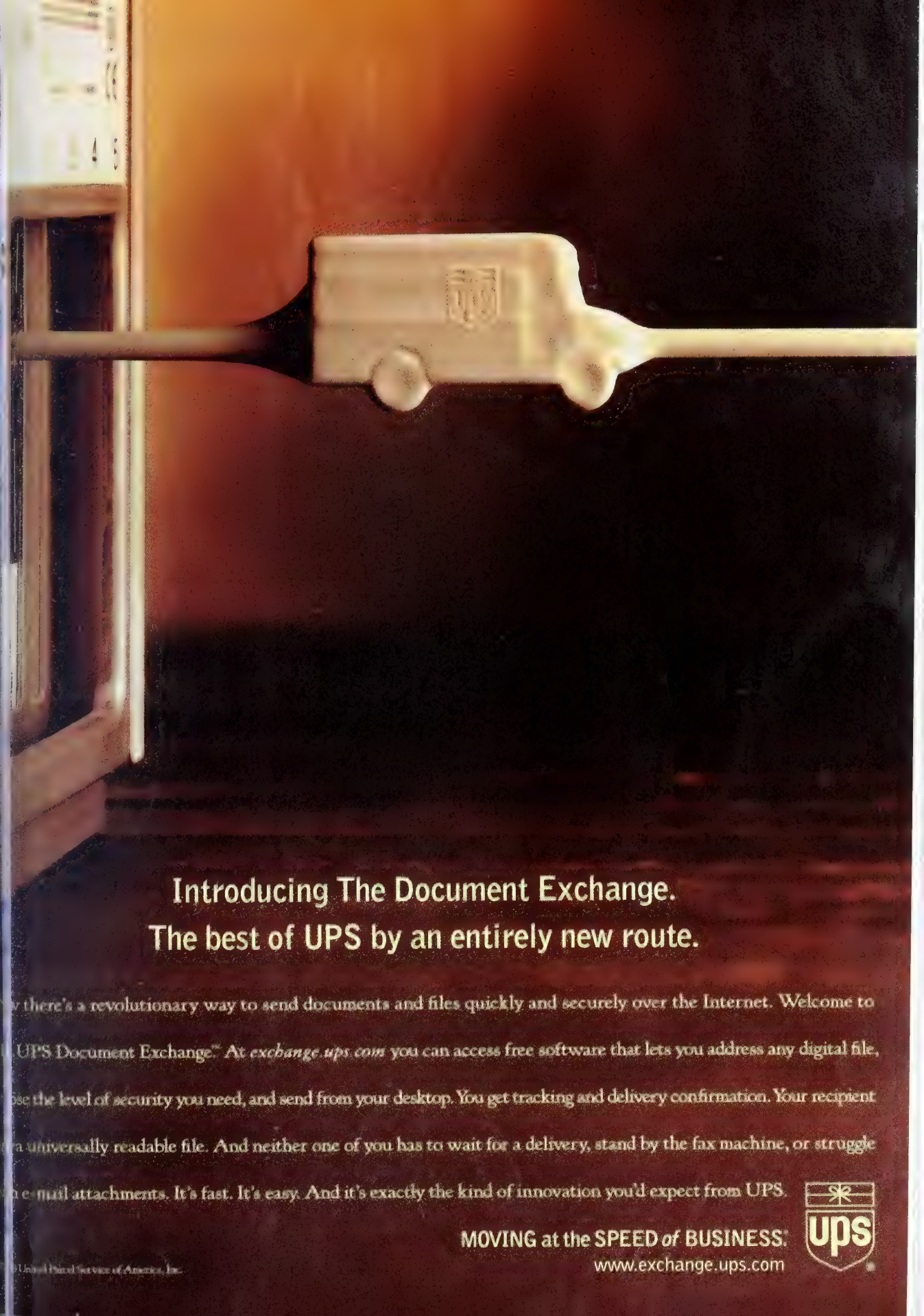
- BE MORE CHARITABLY INCLINED
- HAVE A MORE COMFORTABLE LIFESTYLE
- WORRY LESS ABOUT MONEY THAN I USED TO
- FEEL LESS FINANCIALLY DEPENDENT ON MY JOB
- BE LESS CONCERNED ABOUT JOB SECURITY
- FEEL THE NEED TO SAVE LESS
- WORK FEWER HOURS

DATA: U.S. TRUST CORP

FROM AN APRIL SURVEY OF THE TOP 1 WEALTHIEST A

FOOTNOTES Execs who say Asian economic turmoil isn't affecting business: 65.1%; those hedging financial plans anyhow: 1

DATA: INTERNATIONAL TENANT REPRESENTATIVE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Readers Report

EDITOR'S MEMO

A PROMISING YEAR ON THE TUBE

Last summer, BUSINESS WEEK began an association with *This Week in Business*, a half-hour show produced by WETA-TV in Washington. This Public Broadcasting Service station also produces *Washington Week in Review* and *The NewsHour with Jim Lehrer*. Marking its first anniversary this week, *This Week in Business* looks back on an eventful year, featuring a string of jaw-dropping mergers, the Asian financial crisis, a remarkably durable U. S. economy, and a resilient stock market.

Hosted by longtime newspaper and TV business journalist Sheilah Kast, *TWIB*'s stock in trade is lively, informed analysis—just what our readers have come to expect. Panelists are drawn from editors and bureau staffers at BUSINESS WEEK and other publications, as well as industry executives and analysts. "The show's discussions are always smart and insightful," says BUSINESS WE Senior Editor William Glasgall, a quent guest. "These are people o the front lines of their fields, whether it's the NBA or the IMF."

LIVELY AND INFORMED: *Glasgall with* TWIB*'s Kast*

Nearly a year into our partner with WETA, we're proud to have played a role in wha has become the sharpest half-hour o business commentar on TV. *TWIB*'s prospe seem bright. From i pilot launch in six U cities last July, the p gram is now seen o more than 100 PBS a iates across the cou try. That fast start has landed th show its first national underwrite transport company Roadway Express. If you're a regular viewer, thanks for tuning in. If not, I urg you to give *TWIB* a try.

Stephen B Shepa

Editor-in-C

AT&T-TCI MAY BE JUST A BIGGER HEADACHE

Yes, our long-distance bills have decreased a bit since deregulation. Unfortunately, local phone bills have gone up. In short, we're paying much more a month than when Ma Bell was a monopoly ("At last, telecom unbound," Cover Story, July 6).

As for Tele-Communications Inc., the number of supported channels hasn't changed in more than a decade (TCI "adds" channels by deleting others). The same cannot be said for the monthly charges, which have increased yet again. And when we installed a new extension this winter, TCI limited us to feet of inside cable ("required by Just imagine: By 2000, we'll no have the same 60 channels but on shopping, too—as long, of course, place our TVs, phones, computer fax machines within three feet outside wall. And our bills pro won't be more than two or three higher than they are now.

Diane D
Berkeley,

We all remember the AT&T-NCR er, which made about as much se the AT&T-TCI merger. You touch do not emphasize enough the pr

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e cable network. Coaxial cable is right medium for two-way data e. Coaxial cable on the ground is 30 years old, with lots of nicks ts. Underground amplifiers are e cases in water. Return data is e to all that, plus electrical noise ed by appliances. AT&T will real- upgrading TCI's network to two- ill cost at least double original es and will take twice as long.

Roger Gilodo
Etobicoke, Ont.

GHT GRADES NSIDE WALL STREET'?

nd "A report card on 'Inside reet'" (Finance, July 6) quite in- g. However, I think it would be ppropriate for you to compare erformance of highlighted stocks e "target prices" usually included comments. Based on my obser- of (and occasional investing in) ocks, I would say that the stocks ll short of expectations far ex- ose that meet or exceed such .

Robert F. Morison
Phoenix

ve been following "Inside Wall for a long time. Your choice of hursday evening's closing stock s the basis for your report is ling. After carefully explaining nouncement effect" and pointing at these stocks typically open than their closing Thursday the author chooses to use these nyway. As a result, the statistics reflect what returns readers ave achieved by following "In- all Street" recommendations be- here is no way that they could equired the stocks at the prices as the basis for the analysis. ore appropriate choice for the rice would have been Friday's ice. This is the price that anyone the online column would have I would be interested in seeing a report card using a more ap- tely chosen base price.

Robert Genshaft
Plainview, N. Y.

's note: We believe Thursday's price—the last trade before pub- —is the best starting point for ing the column's performance.

CARE: DON'T NEGLECT IDDLE CLASS

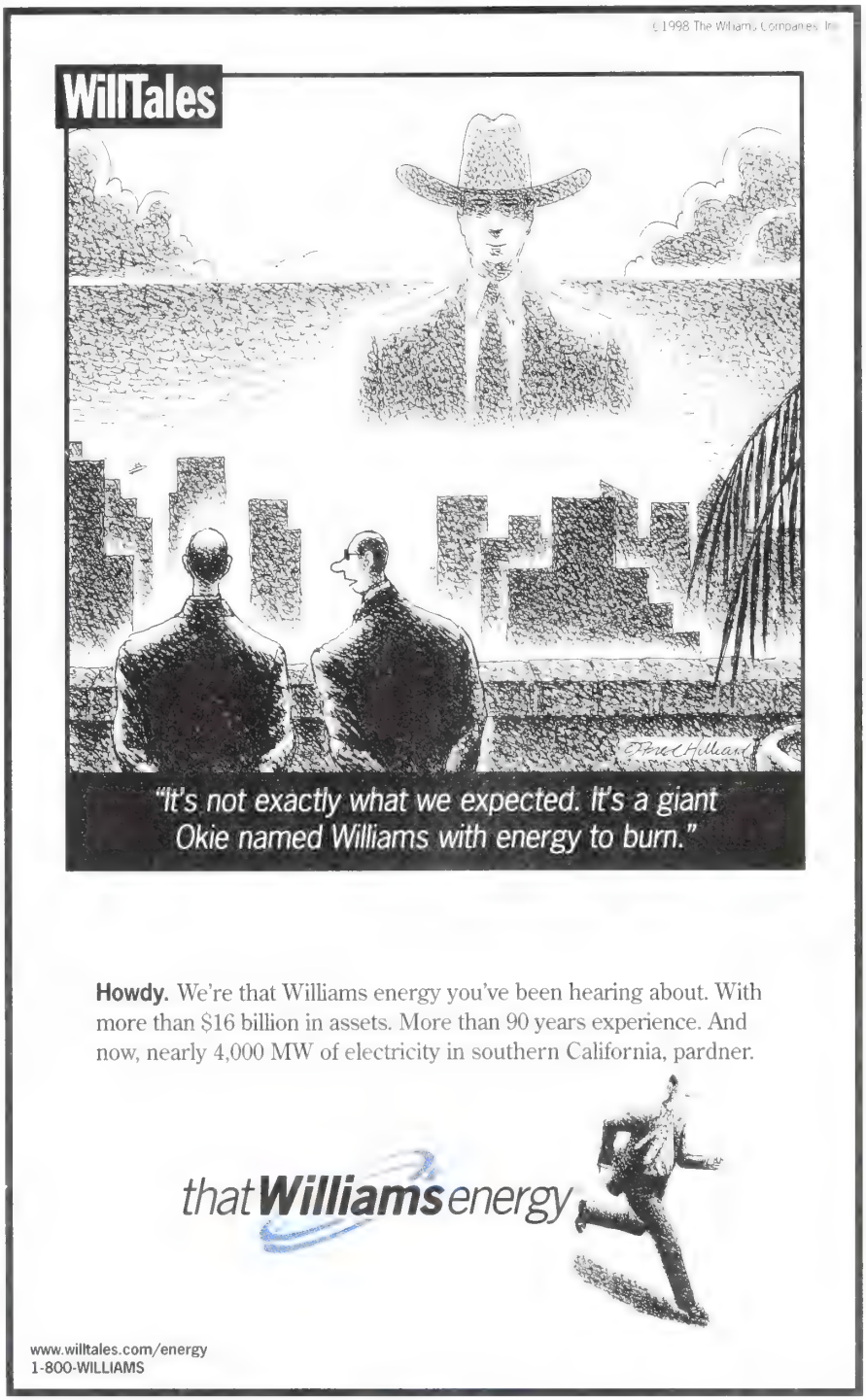
nes for seniors where the living er" (Personal Business, July 6) l on options for elderly people mple financial resources. Most people have a net worth substantially below the $1 million required by the provider featured. According to a 1996 Census Bureau report, the median net worth of households with members 75 and over is $76,541.

The challenge still to be tackled is to provide dependable, high-quality care for those elderly with an average net worth and income. How many of today's established players are rushing to offer choices to the median-net-worth elderly couple? With a combination of government reform, employer support, and entrepreneurial creativity, affordable elderly care choices can and must become a reality.

Elias P. Papasavvas
Fairfax, Va.

ORGANIZED LABOR IS STRONGER THAN YOU THINK

The title was a nice try, but it won't work ("Disorganized labor," News: Analysis & Commentary, June 29). Sow-



ing seeds of dissension with alleged insider information may have worked against organized labor in the past, but it isn't going to work this time.

This is the same institution that just managed to defy the odds in the California election regarding Proposition 226, when the polls showed that proposition was going to be adopted. It is the same organization that helped to secure the passage of a new minimum-wage law. And it will continue to rally the consciences of working people to the idea that it is not enough to be first in business—we must also be first in our ability to consume that which we produce and trade for.

The democratic orientation of the AFL-CIO mandates that its moves and adjustments must be undertaken in an open environment. This can make for some sensitive situations, but the overall program of the organization will remain intact.

James J. Norton, President
Graphic Communications
International Union
Washington

SOMEONE DID INVENT A DROWSY-DRIVER ALARM

In "Your car may be smarter than you" (Science & Technology, June 29), you predict that future navigational systems may include a "drowsy-driver" warning system. It may interest you know that a small engineering firm in New Mexico (Energy Optics Inc., now American Millennium Corp.) developed a low-cost, effective "sleep alarm" to prevent the 200,000 asleep-at-the-wheel accidents each year.

For three years, it has been trying to interest both the industry and the government in this proven system, to no avail. The federal highway-safety organization rejected it, saying it had its own research program—which has spent several million dollars and come up with nothing. General Motors Corp. "studied" it for a full year and finally turned it down at the board level, we were told, because it might fail and lead to more lawsuits.

The Energy Optics system sounds a warning not only if the driver's eyes droop or close, but also if his blink rate slows below his norm with his eyes open, thus indicating unconsciousness. In these three years, this innovation could have saved thousands of lives—and now you predict that it's coming. How nice.

Gordon Molesworth
Green Valley, Ariz.

THAT CHINESE TRADE DEFICIT COMES AT A HIGH PRICE

Half the U.S. end of U.S.-China trade is losing out big time to the Chinese trade offensive ("Clinton: What's at stake in China," News: Analysis & Commentary, July 6). While U.S. importers are going wild from China at around $60 billion a year, exporters are dramatically stunted. The ratio of U.S. exports to imports is 1-to-6.

The trade deficit of $50 billion a year puts that much cash in the hands of the Chinese government to conduct whatever mischief it feels like. Some of it has gone into buying up political influence in the U.S. All the while, millions of workers and hundreds of firms in export industries pay the price.

Carl Olson, Chairman
State Dept. Watch
Washington

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GAIN
By Richard Powers
Farrar, Straus & Giroux • 355pp • $25

'PEOPLE WANT EVERYTHING. THAT'S THEIR PROBLEM'

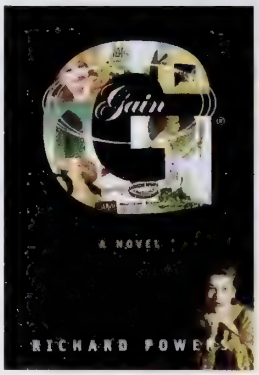
Richard Powers has created a rare thing: a contemporary business novel that is also an important work of fiction. At once an insightful history of American capitalism, a formula-wielding primer on soapmaking (yes, that's right), and an intimate portrait of a woman who is dying of ovarian cancer, *Gain* is a demanding volume that will leave readers marveling at the author's erudition and troubled over the apparent price of civilization.

The book's chapters focus alternately on the fictional Clare International Corp. and on Laura Bodey, a 42-year-old real estate saleswoman who resides in Lacewood, Ill., the home of Clare's agricultural products division. Bodey is hardly alone in her illness: Numerous Clare employees have also been diagnosed with various cancers. Two lawsuits have been filed charging the giant company with responsibility. Moreover, an Environmental Protection Agency report on Clare's toxic discharges has local people worried and angry. The poison, concludes one character, is "in the air and in the water, and now it's in the ground. Builds up in the food. Every year a little more."

But don't expect a simple indictment of corporate polluters. Rather, *Gain* bears a philosophical resemblance to Edward Tenner's *Why Things Bite Back*, an account of technology's "revenge effects" against a humanity that seeks to dominate rather than to coexist with nature. Progress, the author tells us, comes at a price.

The company that we encounter in the book's initial chapters is a far cry from a remote, evil corporate despoiler. Instead, it is an early 19th century, family-run startup, the product of brothers Resolve and Samuel Clare's inspiration and Irishman Robert Ennis' skill at making candles and soap. Back then, "saponification was a complex affair," we learn in one of Powers' several forays into the mysteries of applied chemistry. Ennis "gauged the soapy strings adhering to his stirring paddle, awaiting the exact moment when the soap grained and salted out. He cut the steam and drew off the salt lye and glycerin, letting his broth set like a temperamental soufflé."

Powers' recounting of the company's steady expansion, weathering the decades' economic ups and downs, and its regular ability to adapt to the consumer market provides an early indication of the author's considerable skill. Botanist Benjamin Clare, for instance, supplies the key ingredient for a mid-century killer-app product, Native Balm soap, each cake stamped with the profile of an Indian warrior. The product, which "smelled like the liniment that the angels applied in God's own sickroom," promised a natural cure for "pimples, Salt Rheum, freckling" and the "graver bodily illnesses" of an industrializing society. Its patent-medicine appeal "cut across social strata." And although many companies sought to develop a similar product, not even the formidable British could steal the market.



The Civil War provides Clare with a steady customer in the form of the Union Army. The succeeding decades see the company's incorporation, its increasing emphasis on laboratory research, and its ingenious development of paper soap wrappers ("Safe—Hygienic for country, town, city"), which align Clare's product with a growing public desire for "purity." This in turn helps to rescue the company from ruin during the depression of the 1870s. Later, Clare initiates corporate welfare schemes to win workers' loyalty, and it displays a flair for promotions and advertis
(Bits of Clare advertising copy
throughout *Gain*, providing a hist
miniature of American huckste
When the 20th century rolls a
Clare has become a conglomerat
ducing not only soap but also
gents, fertilizers, cosmetics, hair
ucts, herbicides, and food.

At first, the historical chapte
more engaging than those focus
Laura Bodey. Indeed, who would
to read harrowing accounts of su
and painful, ineffective cancer
ment? As the patient struggles t
prehend her medical problems, d
respond with stupefying medico-j
" 'You'll need to do half a year of
agent therapy. Taxol plus cisplatir
by the way, we don't know for c
whether you are Stage One C.
though your washings are neg
there is still some chance that yo
be Stage Three.' " After surger
patient inspects her scar, "a
gorged leech licking
cream of her belly."
subsequent chemoth
sessions leave her fe
"light, insubstantial, em
yet sick beyond imagi

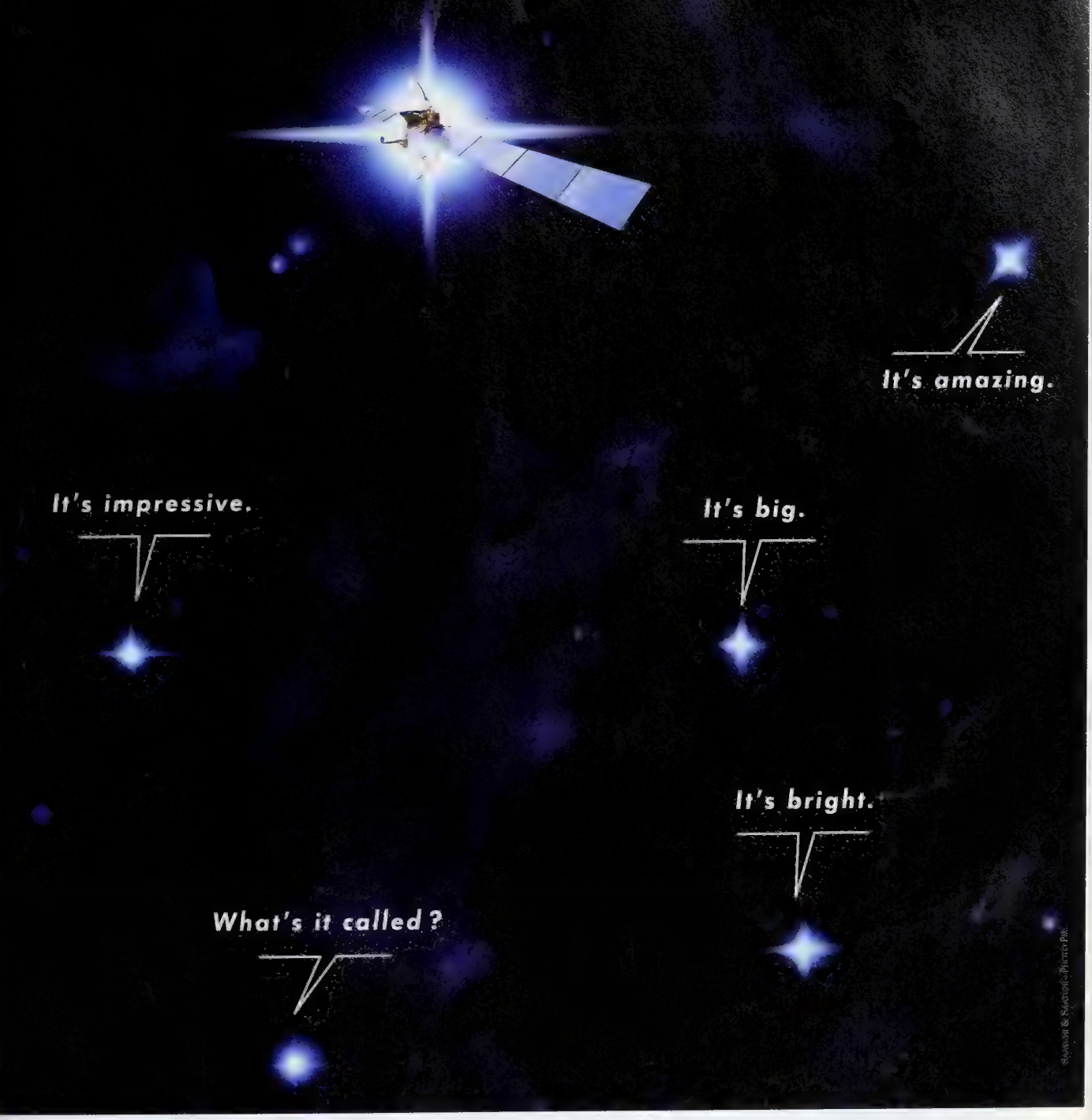
But ultimately, Po
whose previous book
clude such challenging
well-reviewed novels a
Gold Bug Variations
Galatea 2.2, makes us
about Bodey. Like he
tracted kids, we beg
share Bodey's torment. Like he
husband, who prods Bodey to j
lawsuit against Clare, we feel tha
deserves "somebody owning up,
compensation."

That idea has little appeal for B
Rejecting her ex's entreaties, sh
flects that, if chemicals are to b
"she brought them in, by choice,
them in a shopping bag." In the
the victimizer is not so much a c
rate evildoer as it is humanity i
"People want everything. That's
problem," she announces from
deathbed. Indeed, we do want i
and, as Powers reminds us in
somber yet ultimately incandes
work, there are few indications
we'll stop trying to get it.

BY HARDY G

Green is BUSINESS WEEK's Books E

A SUBTLE NOVEL THAT INDICTS NOT JUST CORPORATE POLLUTERS BUT CIVILIZATION ITSEL



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EPHEN H. WILDSTROM

PIFFY PROMOS A JIFFY

new programs photo-based cts for small nesses a snap

he growth of scanner and digital camera sales in the past cou- years has set off an ion of software de- to make it simple for urs to produce classy based projects. But a problem. Manufac- report that many rs and digital cameras ing snapped up by peo- o run small businesses. ime, software packages s Adobe System's Pho- xe and Microsoft's eIt! concen- n family ori- projects such lendars or ng cards to o relatives. v, Adobe 6-6000) and r rival Live e (408 371- have come th products ed to make y for any business a Windows , or NT com- a decent color r, and access to r copier to turn tractive color promo- materials, business and other stationery. also will help you get s onto business Web

ePix SOHO ($50) is es- lly a reworking of the ner version of LivePix, e cutesy calendars with es of the kids have been replaced by dozens of templates for letterheads, flyers, and brochures. PhotoDeluxe Business Edition ($99, or $59 as an upgrade from many Adobe or competitive products) has similar features but is largely a new program. It offers such improvements as easier-to-follow, step-by-step projects and a nifty tool to fix up photos that are slated for the next consumer version of PhotoDeluxe.

VAST ARRAY. Both programs are designed to automate the chore of getting photo images from cameras, scanners, or files into documents. I found LivePix SOHO easier to learn and use, but ultimately less capable than PhotoDeluxe. Its biggest strength is a vast array of templates provided on CD-ROMs—20 each for business cards, mail labels, post cards, flyers, and brochures, and more letterheads and envelopes than I cared to count. Both of the programs also provide easy links to additional templates on their Web sites.

One of the best features of LivePix is how easily you can put your own picture into a template. You just select your picture, click a "substitute" button, and your picture replaces the one in the dummy. The beauty of it is that any special effects used in the template—such as fading the picture for use in the background—are automatically applied to your picture.

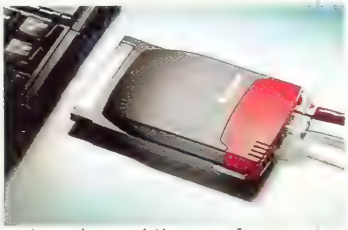
PhotoDeluxe has some tricks of its own. One is the inclusion of a piece of software called Extensis IntelliFix, which is the best software I've seen for one-button fixing of exposure, contrast, and color-balance problems in photos. It also reveals PhotoDeluxe's great secret: If you click its "Advanced" button, you'll find many of the features of its big brother, the $600 Photoshop 5.0, including the ability to use the dozens of third-party "plug-ins" like IntelliFix, written for Photoshop. I liked LivePix' wealth of templates and easy projects, but if you really like to get under the hood, PhotoDeluxe may suit you better.

People planning to use either of these programs should be aware of their uses and limitations in business. They are valuable mainly for producing informal documents such as flyers to be made in production runs short enough to be handled economically by a computer printer or copier. But they are not intended to prepare material for commercial four-color printing. That requires heftier software, and unless you care to learn about such arcane subjects as color trapping and screen angles, you'll need the services of a professional graphic artist.

BULLETIN BOARD

LAPTOP CARDS

Combination PC cards that double as modems and network cards for laptops are very handy. But hooking them up is a pain. The special adapters, known as "dongles," into which you plug your network cable and sometimes your phone line, are



awkward—and they are forever getting lost. The $400 RealPort card from Xircom (805 376-9300) offers an elegant solution. On the end of the card are three wall-type jacks, two RJ-11s for the phone line and a phone, and one RJ-45 for an Ethernet cable. No dongles to lose, no pop-out jacks to break. The downside: The RealPort is an extra-thick Type III card that will fill both the card slots on a typical notebook computer.

WHAT TO DRIVE

Reader Joel Margolese of Andover, Mass., wonders about the difference between "ultra ATA" and "SCSI" disk drives. This alphabet soup describes different standards for moving data in and out of disk drives and computers. Until recently, SCSI was the only way to get really big, fast hard drives for PCs. But now drives built to the simpler ATA design (also confusingly known as EIDE) are fast, reliable, and available up to 16.8 gigabytes. The more expensive SCSI drives are best saved for very demanding applications such as file servers and high-end workstations.

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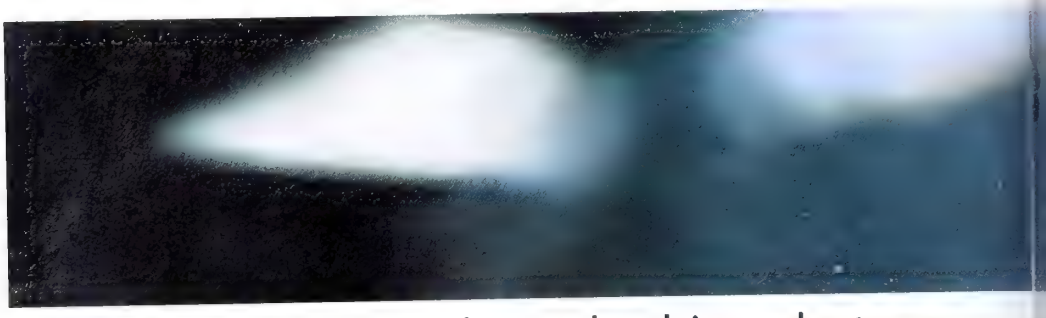

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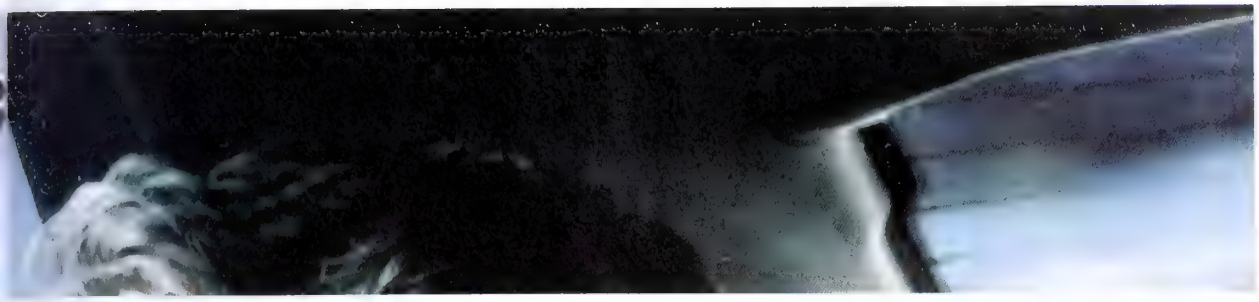

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BY ROBERT KUTTNER

WHAT SANK ASIA? MONEY SLOSHING AROUND THE WORL

NO CONTROL

Floating exchange rates, it turns out, are a tragically bad idea. We must find a way to cut the flows of speculative capital

Robert Kuttner is co-editor of *The American Prospect* and author of *The End of Laissez Faire*

We are learning once again the fundamental difference between free commerce in ordinary goods and free commerce in money. The former is broadly efficient—it subjects business to bracing competition and allows products to find markets anywhere in the world. The latter is destabilizing and deflationary—it holds the real economy hostage to the whims of financial speculation, which is vulnerable to herd instincts, manias, and panics. In ordinary commerce, prices adjust and markets equilibrate. In global money markets, erratic and damaging overshooting is the norm.

Exhibit A is, of course, the Asian crisis. The Asian collapse is widely blamed on structural problems—too much state interference in economies, "crony capitalism," and thinly capitalized banks. But that system, while in need of overhaul, did produce exceptional growth for two decades. The more important cause of the Asian crisis is the sudden exposure of these nations to the speculative whims of unregulated financial capital. It is impossible to run an efficient economy when your currency swings by 100% in just a few months.

EASY TARGETS. The fundamentals of most Asian economies remain enviable—high savings rates, well-educated and disciplined workforces, high rates of productivity growth. However, when these economies became targets for global financial speculation, they were abruptly exposed to forces beyond their control. Hot money poured in, seeking supernormal returns. When the hot money resulted in overbuilding followed by falling expectations, the money poured out just as quickly. To reassure the same global speculative capital, these nations, encouraged by the International Monetary Fund, resorted to tight money and deep economic contraction. The kowtowing to skittish financial markets has led to generalized deflation.

In popular memory, John Maynard Keynes is (wrongly) associated with simple deficit spending. But at the heart of the Keynesian insight about the failure of markets to self-regulate is the disjuncture between the real economy of long time horizons with fixed obligations and the short-term, often irrational character of financial markets.

The Bretton Woods system was an attempt to square this circle. Bretton Woods married free commerce in goods to regulated commerce in money. It created fixed ex rates and controls on private capital ments—precisely so that free trade in could coexist with high growth and f ployment. Financial speculators had no the Bretton Woods system, so there systemic bias in favor of slow growth.

Bretton Woods collapsed, however, b it was never anchored by the global system envisioned by Keynes. Rather temporarily anchored by the U.S. doll when the need to finance expanding commerce collided with the need to m domestic price stability, dollar hegemo came too great a stretch. The U.S. sa fixed exchange rates, finally ending th ton Woods system in 1973. It is more coincidence that 1973 also began the slower growth.

SAFETY NET. With the collapse of B Woods, a new generation of free-mark damentalists insisted that money w another commodity with prices set b kets like the price of ordinary goo change rates should float; all capital r should be totally permeable. Recent however, have proven this view tr wrong.

If we are not careful, the world will deflationary spiral not unlike the Gr pression, triggered by events in As American architects of Asian rescue c cide whether they trust speculative r to govern flows of currency and cap the one hand, the Clinton Treasury ba IMF view—liberalize capital markets, g ernment out of the way, reassure in On the other hand, Treasury Se Robert Rubin talks of the need for A cial safety nets; he encourages Toky out its banks and urges the Chinese pegged exchange rates—none of whi cies exactly reflect deference to marke The policy muddle reflects an inte muddle.

Ad hoc damage control coupled w defeating austerity is the wrong ap Better to act systemically, with a "Tob on short-term currency transactions, s as a more managed system of capit and exchange rates. It remains to whether today's statesmen can rise occasion or whether they are still pr as Keynes once put it, of the ideas funct economists.

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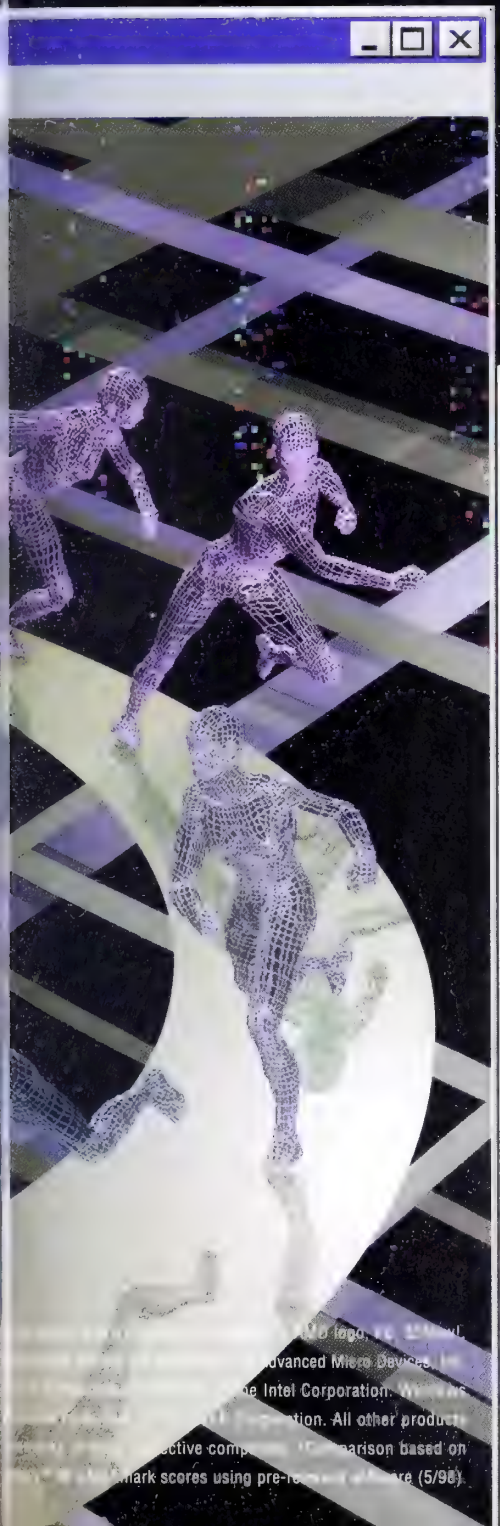

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BY GENE KORETZ

WHOSE ECONOMY WILL PROSPER?

How America's 50 states stack up

The U.S. expansion is in its eighth year, and state treasuries are bulging. But that doesn't mean all 50 state economies are faring equally well—or will prosper in the years ahead.

A good guide to who is ahead of the game is an annual development report card issued by the Corporation for Enterprise Development (CFED), a nonprofit group in Washington. To rate the states, the CFED created three indexes: economic performance, which includes employment and income growth, job quality, and poverty rates; business vitality, which reflects competitiveness and startup activity; and development capacity, which weighs human, technological, financial, and physical resources.

STATES THAT SHINE IN ECONOMIC DEVELOPMENT

1998 DEVELOPMENT REPORT CARD*

	ECONOMIC PERFORMANCE	BUSINESS VITALITY	DEVELOPMENT CAPACITY
COLORADO	A	A	A
WASHINGTON	A	A	A
DELAWARE	B	A	A
MASSACHUSETTS	B	A	A
MINNESOTA	A	B	A
UTAH	A	B	A
OREGON	B	B	B
GEORGIA	A	A	C
NEW HAMPSHIRE	A	A	C
PENNSYLVANIA	C	A	A

*A=Excellent B=Superior C=Average

DATA: CORPORATION FOR ENTERPRISE DEVELOPMENT

In the CFED's 1998 tally, only Colorado and Washington earned As in all three areas. Delaware, Massachusetts, Minnesota, Oregon, and Utah did almost as well, earning only As and Bs, and seven more states had just one C along with two As or Bs. At the other end of the scale, only West Virginia got all Fs.

On a regional basis, the industrial Midwest led the pack, with strong economic performance and development capacity. The Mountain States slipped back a bit while continuing to display considerable entrepreneurial activity. And the Pacific region was booming in the Northwest, but not elsewhere.

Meanwhile, the Plains States were mostly average, though they had good employment gains. And the Northeast did only moderately well in economic performance while earning high marks for human and technology resources.

Although the South as a whole trailed other regions, a number of Southern states boast superior employment conditions. And three—Georgia, North Carolina, and Virginia—earned As or Bs on two of the three CFED indexes.

Indeed, the South may be leading the nation in one key area. While the CFED study indicates that income inequality has been increasing in two-thirds of the states in recent years, it also notes that inequality has decreased significantly in five of the 12 Southern states.

JOHN BULL IS NO UNCLE SAM

Britain's job picture isn't as rosy

Because Britain's unemployment rate is closer to that of the U.S. than to European rates, many experts claim that its economy is taking on the dynamism of its former colony's. Economist David Mackie of Morgan Guaranty Trust Co. (JPM) argues, however, that the comparison is overdone.

A more pertinent yardstick, he says, is employment growth, and in this area it turns out that Britain's job gains look far more like Europe's than America's. Since 1985, for example, while employment rolls have risen by about 29% in the U.S., they have increased by only 10% and 7% in Britain and the Euro areas, respectively.

As it turns out, the gap between Britain's and Europe's unemployment rates really reflects differences in the growth of their labor forces. While Europe's labor force has grown by 7.9% since 1985 (and America's by 19%), Britain's is up by only 1.7%—allowing it to reduce its unemployment rate with relatively modest job growth.

Still, observes Mackie, Britain is now closer to the U.S. and far ahead of Europe in one key respect: Some 71% of its working-age population has jobs, compared with 75% in the U.S. and only slightly more than 58% in the Euro area.

THE GAMES TAXPAYERS PLAY

How some react to an audit thr

Sometimes economic analysis tur unexpected and provocative re That's the case with a new Nat Bureau of Economic Research stu Marsha Blumenthal, Charles Chri and Joel Slemrod dealing with a r experiment designed to throw lig tax evasion by taxpayers.

In the experiment, the state of nesota sent letters to some 1,700 nesotans in early 1995 informing that their 1994 state and federal in tax returns would be "closely e ined" by state authorities. Afte group's returns were filed, they compared to their 1993 returns a the 1993 and 1994 returns of a trol" group of similar taxpayers received no such notice) to see i warnings caused the letter receiv report more income.

As expected, the researchers that most taxpayers who received ter did report more income in 199 ative to the control group. For low middle-income taxpayers, the diffe boosted their total taxes by an av 2%—although for middle-income who listed business or farm incom ported tax liabilities rose by 12%.

What was totally unexpected wa effect of the letter on taxpayers wi comes over $100,000. This group ac reduced their reported incomes re to their peers in the control group ting their taxes by at least 17% a some cases by as much as 35%.

Why would high-income filers r significantly less taxable income receiving an audit warning? One bility is that they and their tax ad took more care in preparing re and thereby found legitimate wa reducing their tax bills. Given t phistication of affluent taxpayers, ever, it's questionable whether the been overlooking such large tax ings in the first place.

A more likely scenario, specula authors, is that taxpayers and the visers decided to take a more aggr stance—creating, in the process, potential tax liability as a negot gambit. In this view, the threat audit inspired many filers to take questionable "extra" deductions hope that finding them would n government auditors—and thus off more intense and protracted s of their returns.

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LOT TWISTS N THE SECOND HALF?

ventory growth and foreign trade could send the script in new directions

U.S. ECONOMY

Like network reruns, the latest data seem to repeat what ve already seen. Consumers continue to whip furiy around the shopping malls. Producers are slowing ut in response to the Asian crisis, and the inflation bers look tame. But don't let the recurring trends you. Like season-ending cliffhangers, the economy's ormance in the second quarter could open the way plot twists this fall.

learly, the economy slowed last quarter, perhaps cipitously, given the falloff in inventory gains rt). But the data over the next few months will be cial in showing whether growth is shifting into a er gear or just taking a breather. The implications inflation, Federal Reserve policy, and Wall Street be especially consequential.

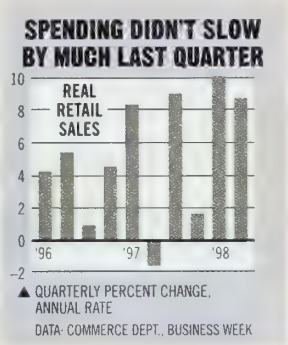
The Fed is already increasingly nervous as it waits for the economy to slow. Despite the tame June data on consumer and producer prices, inflation clearly has stopped falling and, in fact, picked up a bit in the first half of 1998, compared with its 1997 pace. A slowdown in the economy for the rest of the year will be needed to assure both cymakers and investors that any inflation pickup will small. Stock and bond investors are betting that tion and interest rates will stay comfortably low. the odds are rising on that wager: At the Fed's meeting, two formal dissents were cast against ing policy unchanged (page 76).

s if the Asian crisis were not enough to alter the nomy's landscape, the strike at General Motors p. will make it even harder to make sense of the a in coming months. The work stoppage has aly hit June output and employment, and now that it dragged on into July, this month's indicators of vity will get hammered even harder, as the impact eads out to secondary industries.

KEY AREAS TO WATCH will be consumers, for- trade, and inventories. First, though retail sales ved in June, consumer spending stayed surprisingly ng last quarter, and any overall slowdown will not unless consumers participate. Second, the Asian impact on trade has been somewhat larger than generally expected, but its drag on U.S. growth is likely to lessen in the second half. And third, slower inventory growth, after a huge first-quarter buildup, took a big bite out of second-quarter growth, but the impact of inventories on growth in the second half is still iffy.

The combination of strong demand and slower output growth last quarter appears to have cut inventory growth substantially. Business inventories in May fell 0.1%, after a 0.1% increase in April. In the first quarter, stockpiles rose an average of 0.5% per month.

Looking ahead, inventory levels are not out of line with sales, given that the ratio of stock levels to sales held at 1.38 in May, close to the average for the past year. However, the April and May data suggest that any necessary adjustment of inventory levels is occurring very rapidly. While that sharp slowing in stocks undoubtedly subtracted a big chunk from second-quarter economic growth, it also means that less adjustment will be necessary in the second half, especially if demand remains strong.



IN FACT, ONE OF THE BIGGEST surprises in the second quarter was the resilience of consumers. While retail sales rose a scant 0.1% in June, May purchases were revised up to show a 1.2% jump, instead of the 0.9% gain originally reported. April buying rose 0.7%. Retail sales grew at an annual rate of 8% last quarter, about the same as the 8.3% increase in the first quarter, and even after adjusting for inflation, sales did not slow very much (chart).

In fact, based on key retail groupings used by the Commerce Dept. in calculating real consumer outlays for the gross domestic product report, along with the quarter's surge in car sales and service purchases through May, real household spending appears to have risen at an annual rate of 5% or more last quarter. That advance would follow the first quarter's 6% surge. First-half outlays may well show the strongest two-quarter gain in more than a decade.

A dropoff in consumer spending in the third quarter seems almost inevitable—though that's what most analysts said after the first-quarter spurt. This time,

ERIC HEIFFMANN/BW

however, the culprit will be car sales. Generous incentive programs in May and June lifted sales to levels not seen since the late 1980s. The quarterly increase was the largest in five years. The June 30 expiration of those deals, along with an expected shortage of GM cars, will hit sales hard this summer, acting as a big drag on overall consumer spending even if consumers continue to buy plenty of other stuff.

THE LATEST DATA may show that consumers are keen on shopping, but they generally remain bargain hunters, as the success of the May and June auto incentives makes clear. But some producers have been able to slip through price increases, especially for services and even for some goods that face little foreign competition. Those increases suggest that while inflation will stay low this year, the best news on the price front is past (chart).

Overall consumer prices rose 0.1% in June, after a 0.3% increase in May. Core prices, which exclude the volatile food and energy components, increased 0.1% after a 0.2% gain in May. But so far this year, core prices have advanced at a 2.5% annual rate, up from the 2% pace in the last half of 1997.

The source of that acceleration is surprising. Core service prices are rising at a 3.1% annual rate in 1998, vs. 2.9% in the latter half of 1997, but core goods prices are up 1% so far this year, compared with just a 0.1% gain in the previous six months. Tobacco prod medical commodities, and used cars and trucks contributed greatly to the acceleration in goods pr

That small uptrend echoes a similarly gentle ri producer prices. Core prices of finished goods risen 0.2% in each of the past three months, and have grown at a 1.4% annual rate so far this compared with just 0.1% over the previous six mo As in consumer prices, tobacco and drugs have the price increases at the producer level.

For the rest of the year, at least, import prices should provide some relief to the recent uptick in goods inflation. Nonoil import prices fell 0.3% in June and are down 3.6% from a year ago. The dollar's continued strength means the prices of foreign-made goods could fall further through the rest of 1998.

HAS INFLATION STOPPED FALLING?

▲ PERCENT CHANGE FROM A YEAR A
DATA: LABOR DEPT., BUSINESS WE

But unless a cooler pace of domestic demand slows the overall economy, h grown price pressures will overcome foreign-gene inflation benefits. If so, discord among Fed p makers will spread beyond just two dissenters. that's one plot twist in the second half that Street would not welcome.

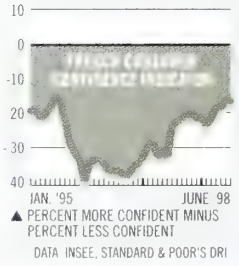
FRANCE

PARIS IS BREATHING EASIER

Fueled by slow but steady improvement in its job market, France is leading euro-area growth. A domestic-led recovery is taking root, more than offsetting the Asian drag on exports.

While France still has key structural problems, especially in its labor markets, the outlook for this year and next is quite good. Economists generally agree with the government's projection of 3% growth in 1998, up from 2.3% in 1997, and the fastest since 1989.

THE MOST OPTIMISM IN THREE YEARS



▲ PERCENT MORE CONFIDENT MINUS PERCENT LESS CONFIDENT
DATA: INSEE, STANDARD & POOR'S DRI

Consumers are leading the way, stoked by income gains and the highest confidence in three years (chart). In June, more consumers thought it was a good time to buy, more saw their financial situations improving, and job worries eased further. Joblessness, which hit a postwar high of 12.6% last year, is down to 11.9% in May, and it will go lower. France is expected to create 300,000 jobs in 1998. With inflation projected to stay at a low 1%, those job gains are boosting buying power.

Recent reports suggest that second-quarter consumer spending rose even faster than in the first quarter. Retail sales are strong, helped by the World Cup, and car sales are up 10% in the first half. Also, with builders' confidence the highest in six years, new construction is lifting demand for building materials and home-related goods.

A capital-spending recovery i also under way and it will gain speed, fueled by higher profits, low interest rates, rising capaci use, and the need to modernize Business investment in the firs quarter posted the strongest g in two years. The latest busine confidence survey shows that more companies expect to lift c put than at any time since 198 Also, prospects that faster gro will lift profits but not inflation have pushed the CAC 40-stock i dex up 44% this year.

While April's trade deficit wi Asia—excluding Japan—was th highest in seven years, France sends only 10% of its exports t Asia, while 60% go to Europe the U. S. Continued strength i those markets, plus new vibran in domestic demand, means sol growth in coming quarters.

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GM: IT'S TIME TO

COMMENTARY By Kathleen Kerwin

Six years ago, directors of General Motors Corp. staged a revolution. They kicked out the chairman-chief executive and split the job. They forced the new team to come to grips with the auto giant's financial problems—auto losses approaching $10 billion a year and a balance sheet with $24 billion in unfunded pension liabilities. In the process, the GM board, populated with blue-chip outsiders from some of America's most respected companies, became the model of good corporate governance.

Now, that reputation is in jeopardy. All the achievements of the GM directors—and the management they employ—are being overshadowed by their glaring failure to address adequately the most fundamental problem of all: GM still doesn't design vehicles the public wants, build them efficiently, or market them effectively. Until GM's leaders can do that, no other measures—including their bitter showdown with organized labor—will do much to reverse its alarming slide.

HAUTEUR. The company's second-quarter results, released on July 14, are just the latest proof of how bad the fundamentals are. Even excluding the impact of current strikes, operating income slid 24% in the three months, as rivals Chrysler Corp.'s operating profits rose 9% and Ford Motor Co. posted a 7% gain. GM's core North American auto operations had a 2.7% net margin—about half of the 5% goal that Chairman John F. Smith Jr. set five years ago and below Ford's 7.3% or Chrysler's 5.2%. The unit's net income—again, leaving out strike losses—dropped 18% in the quarter from the year earlier period because of rising incentives and declining wholesale volume.

And, despite years of promises to improve productivity, the latest numbers show GM still far behind. It takes 46.5 hours of labor to produce a GM vehicle, according to a July 15 report by consultants Harbour & Associates—compared with 31.7 hours at productivity leader Nissan and 34.7 at Ford.

Scary as these numbers are, things could get worse. Remember, this is how GM is performing when the auto market is about as good as it gets. The economy is strong, interest rates are low, and consumers are snapping up vehicles at the fastest rate in a decade. When the U.S. economy slows, GM's mediocre performance could turn into a debacle.

> Management is stuck in a time warp. If Smith and his team duck again, GM's directors ought to consider another coup

So, what's wrong with management? Despite all the progress in the past few years, the top brass—and the tens of thousands of apparatchiks who drone away in GM offices—are stuck in a time warp. They approach the market with the hauteur and complacency of a gargantuan bureaucracy—that the company developed in mid-century, when it was the most dynamic industrial enterprise in the world.

Today, GM's approach is as dated as the portholes on a Roadmaster. Ford, Chrysler, and other rivals long ago moved on, cutting costs, streamlining distribution, raising efficiency, and cranking out innovative models in record time. They have left GM behind—and in key areas it continues to slip: productivity, market-share growth, product development times, overhead expenses, and revenue per vehicle sold (chart, page 28).

ACE THE FUTURE

ecent months, competitors have upped the ante. Ford, y leaner and more efficient than GM, has slashed costs by illion so far this year, on top of 1997's $3 billion in cuts. ly 14, news leaked that Ford will offer buyouts to trim f its 53,000 salaried workers this summer. In six years, s only managed to trim 18% of its white collar staff— is still substantially larger than Ford's. Smith's team— aged by Motown critics as four bean-counters and a —continue to do what they do best: fine-tune the bal- heet and reshuffle the deck chairs on a dated org chart.

TO THE FIFTIES." Even GM's hardline labor stance—and nion's militant response—is a throwback. Six weeks ie latest crippling strike, the sides are growing further After negotiations broke down on July 12, GM sued, nging the union's right to strike. The UAW returned ith threats to strike the Saturn plant at Spring Hill, supposedly the model of management-labor harmony. ls Cornell University labor professor Harry Katz: 've gone back to the Fifties."

nittedly GM's brass inherited a nightmare, but even oncede they must do better. "We're not where we o be," says Chief Financial Officer J. Michael Losh. "We o move faster."

ed will help. But it's most important to head in the right direction. GM execs are still in deep denial about their product and marketing strategies. In fact, they earnestly insist their new models are home runs.

That's just not so. GM's U.S. market share—near 50% three decades ago—dropped to a dismal 28.6% in February. Its spanking-new midsize sedans—among the vaunted successes—weren't selling as well as their lackluster predecessors. It took the biggest rebates in Detroit to boost GM market share back above 30% this spring. And analysts say that without the rebates, share will drop back. "The dogs don't like the dog food," says Arthur D. Little Inc. auto consultant John Wolkonowicz. "GM has neither a golden gut (instinct) nor a way of understanding the needs of future customers." A perfect example: While consumers clamored for four-door pickups, such as those produced by Dodge and Ford, GM is introducing a three-door.

Even GM cars that are well-conceived sink in the market because of the company's poor brand image, too much competing advertising, and botched manufacturing launches. The new Intrigue sedan, for instance, is one of the finest cars in its class, but it's doubtful that many baby boomers will ever wander into an Oldsmobile showroom to check it out.

This is the kind of challenge that the best "car guys" in Detroit would have trouble with. But cars are not Jack Smith's passion. Unlike Volkswagen Chairman Ferdinand Piëch, Chrysler's just-retired Vice-Chairman Robert A. Lutz, or Ford President Jacques A. Nasser, Smith never got grease under his fingernails as a teenager. He rose through the Treasurer's office in New York, then went to Canada and Europe, where he executed new strategies effectively, but on substantially smaller operations. Why does it matter? An executive can't possibly fix a problem until he recognizes it.

GM's situation is not unique. We've seen this sort of steadfast avoidance of reality at other corporations—at McDonald's Corp., another once-great marketer that was slow to recognize

"When are they going to realize the trouble they're in?" asks one dealer

that consumers aren't buying Big Macs like they used to, and at GM's neighbor Kmart Corp. in Troy, Mich., which lost touch with its customers in the mid-'90s. "It's like a guy falling from the 60th floor—You ask him halfway down how he's doing and he says, 'Everything's fine,'" says Martin J. "Hoot" McInerney, a suburban Detroit Cadillac dealer. "When are they going to realize the trouble they're in? Sooner or later, it's got to hit them in the eye."

CRIPPLING BAGGAGE. GM's growing determination to win the current strike may be a signal that the company is ready to act. But it will take far more than a win in Flint and some more incremental cuts to get ahead of the problems. GM still has factory capacity, marketing structure, and distribution geared to owning 35% or more of the market—a share it may not ever see again. It still has seven marketing divisions with 80 car and truck models. Likewise, there aren't enough sales to support GM's sprawling network of 8,000-plus dealers profitably. This excess baggage is crippling. "GM can no l afford to keep all those car lines current—they don't hav cash flow," explains consultant Wolkonowicz. "They fall f and further behind because the competition can change uct more quickly."

Even GM Europe—whose performance was for year envy of auto makers around the globe—now has stumble built factories in Asia and South America, rather tha vesting in Europe. In the U.S., the company has starve innovative Saturn unit, which is now languishing for l new models. The company's big new bet—in China—n not pay off for years, if ever.

Smith and the board have little choice but to launc other revolution throughout the company, if GM is to rem major auto maker in the 21st century. "GM still has th ent," says Richard A. D'Aveni, professor of strategic agement at Dartmouth's Amos Tuck School of Busines ministration. "The question is wh they have the guts." If Smith an team duck again, GM's board oug consider another coup.

FRESH BLOOD? This time, maybe tors should look outside GM for a tal leader—the way IBM hired Louis V. G ner Jr. GM's stultifying culture migh even harder to crack than Big Blue's perhaps only an outsider can hope to Some analysts and dealers privately a "This is a company that needs a n new management team—again," say Wall Streeter. "They've had six good to do better." Chimes in a dealer: "W all been thinking for some time that Jack Smith on down, there should been changes and there haven't beer

Sadly, the top internal candidate, Chairman Harry J. Pearce—a former marck, N. D., attorney who became company's general counsel 13 years and is the closest thing there is t outsider—has been diagnosed leukemia. That clouds succession and hopes for radical change from wi

Change must come, one way or an Inside GM, executives cling to the h that their cars will somehow stage a c back. "Even though we've done ev thing possible to neuter and nuke brands, we're still around," says Micha DiGiovanni, the company's head of ket research. Imagine what they coul if they started to nurture those bran

Kerwin is Business Week's De bureau chief.

GM VS. FORD: WHO'S NO. 1?

	GM	FORD
1997 revenues	$178 BILLION	$154 BILLION
1997 profits	$6.7 BILLION	$6.9 BILLION
Vehicles sold 1997 (worldwide)	8.78 MILLION	6.94 MILLION
Vehicles sold 1997 (U.S.)	4.73 MILLION	3.81 MILLION
Market share (1st 6 mos. 1998)	31.5%	24.5%
Price-Earnings ratio	10.7	11.6
Labor hours per vehicle	46.5	34.7
Pretax profit per vehicle (in North America)	–$104	$1,520
Revenue per unit (North America)	$18,022	$19,761
Selling, general & administrative expenses as % of sales	8.2%	5.6%
Car/truck mix	44%	58%
Number of hourly workers*	156,525	75,569
Unit output/worker*	27.3 UNITS	45.6 UNITS
Number of assembly plants	29	20
Number of senior managers & change since 1992	72 UP 47%	46 DOWN 37%
Senior management productivity: Revenue per officer & change since 1992	$2.12 BILLION DOWN 22%	$2.67 BILLION UP 91%
Number of models	56	27
Market share per model	0.56%	0.93%
Number of marketing divisions	7	3
Share per division	4.4%	8.4%
Number of dealers	8,090	5,000
Units sold per dealership	552	761

*Excludes parts workers

DATA: GENERAL MOTORS CORP., MORGAN STANLEY DEAN WITTER, *WARD'S AUTOMOTIVE REPORTS*, HARBOUR & ASSOC

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)UGHER SAILING :ROSS THE ATLANTIC

.S.-European trade dispute is turning nastier

ith Japan in recession, growth slowing in China, and Southeast Asia in financial meltdown, many exporters have been banking on)pe for salvation. Export growth to European Union was up a robust through April. More than $1 trilin trade and investment already es across the Atlantic each year. e 24% of U.S. goods exports go to)pe—more than to Asia (23%) or h America (9%). Now, with Presi- Clinton's prodding, the U.S. and will explore a "transatlantic eco- c partnership" for even more trade.) it's more than a little troubling for ness leaders to see a transatlantic e spat brewing. Disputes are erupt- ver long festering problems, such as)pean restrictions on bananas, beef, corn, while new feuds arise over E- nerce and tax policy. Relations are ing at a time when the trade part- need each other more than usual. these difficult problems," worries rd Berry, European-American Busi- Council president, "can have the g effect on trade."

ne latest flare-up came on July 7, n Sir Leon Brittan, the EU's acerbic e negotiator, delivered a list of com- ts to Washington. Chief ng them: U.S. tions that ld pe- e eign corporations for investing in Iran, Iraq, Libya, Cuba, or Burma. Angry because Congress shows no signs of lifting the penalties, Brittan even threatened to challenge a Massachusetts law forbidding contracts with companies that do business with Burma.

Brittan also filed a complaint with the World Trade Organization over a U.S. tax loophole that allows more than 3,000 American companies to escape some income taxes on export earnings. American officials shot back that the U.S. tax law was changed in 1984 at Europe's request. "The European plan is to demonstrate muscle-flexing, no matter how irrational," says U.S. Trade Representative Charlene Barshefsky.

Indeed, with anxiety over globalization running high in Europe, Brittan is under pressure to bash Washington. For example, the French have blocked U.S. imports of genetically engineered corn to protect French farmers. Animal rights groups are furious with Brittan over an agreement last December relaxing European restrictions on furs from the U.S. obtained by use of leg-hold traps. And Brittan and the EU are still fuming over two recent WTO rulings that European quotas on bananas from U.S. exporters and a ban on U.S. hormone-treated beef imports are discriminatory. The Europeans have so far dragged their feet on compliance with the two rulings—costing U.S. beef producers more than $100 million a year, according to the National Cattlemen's Beef Assn. "The EU is blatantly stonewalling the WTO," says Kansas cattleman Dana Hauck, an association official.

"FEVER PITCH." Even small disputes could seriously disrupt the world's largest bilateral trade relationship. Washington hopes to reduce European farm subsidies—which underwrite exports of European crops—in trade talks set for 1999. But Europe sees U.S. farm imports as a threat to its picturesque countryside and its mom-and-pop distribution system. "This has reached a fever pitch in Europe, and the situation is getting worse, not better," warns Jeffrey Lang, a former Clinton Administration negotiator in charge of European trade relations. At stake is nearly $9 billion in yearly U.S. exports. More problems loom with the growth of E-commerce. The EU has proposed banning electronic transmission of any information about its citizens—such as credit-card numbers, sales orders, and credit reports—unless countries provide "adequate" privacy protections. That could mean EU officials blocking sales over the Internet.

Europe and the U.S. may choose not to escalate further given the stakes. But if next year's trade talks are to succeed, the two sides will have to start lowering the temperature now.

By Paul Magnusson in Washington

ANS- LANTIC RADE FFS

BANANAS

The European Union discriminates against bananas from U.S.-owned plantations in Central and Latin America, according to the World Trade Organization.

BEEF & CORN

The EU excludes U.S. beef amid fears of growth hormones used in U.S. cattle production. France has also blocked imports of genetically altered corn from the U.S.

U.S. SANCTIONS

Congress refuses to lift U.S. sanctions on countries that do business with Cuba, Libya, and Iran. The EU threatens to take the U.S. to the WTO over the matter.

SUBSIDIES

The EU has filed a WTO complaint against U.S. tax breaks for exporters, and the U.S. has a dispute with Europe over subsidies to Airbus and to European farm products.

AGRICULTURE

DROWNING IN AMBER WAVES OF GRAIN

Without price supports, farmers are looking at a nasty year

After 35 years, Elmer Boucher is quitting. The 61-year-old farmer on Mar. 31 auctioned off his machinery and finished putting his 2,000-acre farm in Rolette, N. D., into the federal government's Conservation Reserve Program, which removes environmentally sensitive cropland from production. "There's no point continuing," says Boucher. "I wouldn't have made any money this year."

Boucher is not alone. Farm sales across the Northern Plains states are on the rise. In one North Dakota district along the Red River, 15% of farms have been sold since 1996, says State Agriculture Commissioner Roger Johnson.

For the past two years, farmers have enjoyed boom times along with the rest of America, giving them some cushion against bad times. But now there's trouble down on the farm. Even as the economy is expected to rack up a robust 3% growth rate this year, the Agriculture Dept. predicts that total net farm income will drop by more than 10%, to $45.5 billion.

That's assuming commodity prices don't fall further. They've been plunging around the globe since the beginning of the Asian crisis. And with the third consecutive year of strong U. S. harvests coming, prices could be under more pressure.

At the same time, the federal price supports that buffered American farmers have disappeared. It all adds up to trouble for farmers in the U. S.—and in the communities and industries that depend on the agricultural economy.

Farmers weren't expecting such a rough transition to market-price agriculture. In April, 1996, when Senator Richard G. Lugar (R-Ind.) and Representative Patrick Roberts (R-Kan.) pushed through the Freedom to Farm Act, eliminating price supports on key crops, there wasn't a lot of protest from farmers. With commodity prices and farm incomes high, it seemed time to get the government out of farming. So the government stopped paying farmers to plant certain crops or keep fields out of production as a means of supporting prices.

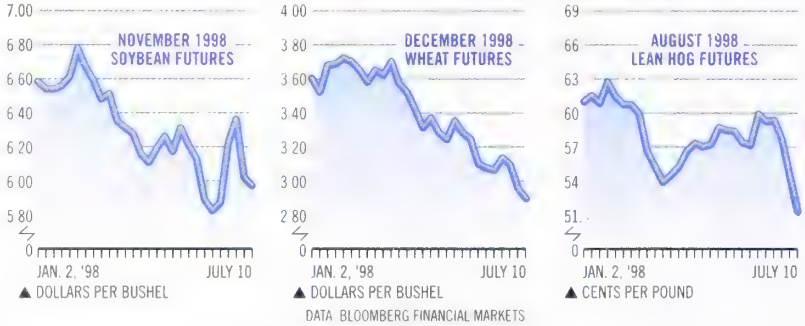
Now, with the prices of corn, soybeans, and wheat, the three major U. S. crops, down 47% on average since the [illegible] Act was passed, freedom looks a lo[illegible] appealing. Says Bill Northey, a fa[illegible] president of the National Corn Gro[illegible] Assn. who farms 740 acres of cor[illegible] soybeans in Spirit Lake, Iowa: "[illegible] are the tough times."

With elections looming in the fal[illegible] mocrats have seized on the farm [illegible] On July 14, Senate Minority L[illegible] Thomas A. Daschle (D-S. D.) and a [illegible] of Democratic senators from upper [illegible] states announ[illegible] plans to fight [illegible] amendments to [illegible] Farm Act. They [illegible] emergency assis[illegible] for hard-hit re[illegible] And they aim t[illegible] move the cap [illegible] government ma[illegible] ing loans and e[illegible] the terms on [illegible] which still give [illegible] ers a floor pric[illegible] their crops in [illegible] weak markets.

Despite the g[illegible] ing plight of farmers, some expert[illegible] leery of a revived federal role. Says [illegible] ry Francl, senior economist for the A[illegible] ican Farm Bureau Federation, a lob[illegible] group for farmers: "To test the new[illegible] program, we have to go through a [illegible] cycle and have farmers react to it."

If you want a test, this is a good[illegible] Not only did the Asian crisis drag [illegible] commodity prices around the globe [illegible] also depressed export markets. The [illegible]

COMMODITY PRICES TUMBLE



DATA BLOOMBERG FINANCIAL MARKETS

ects that lower Asian demand will total U.S. farm exports down 7.4% year, to $56 billion.

eanwhile, unusually good weather is much of the country may produce per crops for a glutted market. The . expects corn and soybean harvests and 2.8% larger than last year's. il harvested a record crop of soy- s this winter. China, which three s ago was importing 500 million els of corn, now exports the stuff. could still see significantly lower s," predicts Steven Bruce, a com- ty broker with ED&F Mann.

ices of wheat futures have fallen this year, while prices on soybeans off 5%. At $2.36 a bushel, the De- ber corn contract at the Chicago d of Trade is selling for less than its price in 1995 and very close to a er's cost of production, says Northey. ne sagging prices would normally boon for livestock producers, who grains and soybean meal to feed animals. But an abundance of p grain is leading to an abundance eap livestock—and the price of live on the Chicago Mercantile Ex- ge has dropped 32% in the last . "This helps us stay in business he a day or two longer," says am B. Saunders, purchasing director Murphy Family Farms, the largest producer in the country.

GEAR MAKERS NEXT? It won't be before farmers' distress shows up at farm equipment manufacturers. In- rs already expect trouble: Since mid- l, share prices of the four major pment producers, Agco Corp., New and Corp., Case Corp., and Deere & have dropped more sharply than modity prices. Even Deere, which es only half of its revenues from equipment, has seen its stock price 20% in the past three months.

ase Chief Financial Officer Theodore rench says he isn't worried—so far. ere's a relationship between com- ity prices and volume in our busi- , but it hasn't shown up yet," he . Still, falling prices of grains, along oil, forced Case to postpone some combine sales to former Soviet re- ics last month, when financing fell ugh. And with June industry inven- s of tractors and combines up 14% 31%, respectively, over last year, ac- ing to the Equipment Manufactur- Institute, the evidence may be right nd the corner.

he situation is nowhere near as dire he mid-1980s, when high interest s, inflation, and drought put a death- on farmers. But America's farmers d face profitless bounty.

y Andrew Osterland in Chicago, with nis Blank in Orlando, Fla.

WHY COTTON FARMERS ARE IN A TANGLE

Cotton farmers ought to be having the time of their lives. Cotton prices have moved up from four-year lows earlier this year to a recent two-year high, making the fiber crop one of the few bright spots among U.S. commodities. October cotton futures have climbed from a low of 65.6¢ a pound in early April to 75.6¢ a pound on July 15.

For the farmers who can take advantage of it, like those in Mississippi and Arkansas, the price rise is a boon. But for most cotton farmers, the price windfall is a symptom of their crop shortfall. Three months of scorching heat and scant rain in Texas—weather that has now claimed lives—and downpours and unusually cool temperatures in California have stunted cotton crops in the nation's two largest cotton-producing states.

SCORCHED: *Drought-ravaged Texas cotton*

DELAYED SEASON. The drought has destroyed a third of the 5.4 million acres of cotton fields in Texas and caused estimated producer losses of $500 million, says Texas A&M University cotton economist Carl G. Anderson. Meanwhile, heavy rains in California have delayed the Golden State's cotton season by nearly two months. As a result, the industry is facing its lowest output since 1990. The lower crop yields in the two states will help bring 1998-99 U.S. cotton production down to 15 million bales. That's a decrease of 20% from last season, according to the Agriculture Dept.

Cotton farmers can't count on a comeback next year, even if the weather cooperates: By the time they can get another cotton crop in the ground, prices are likely to fall. "Cotton prices have been artificially pumped up by the weather scare," which caused the production shrinkage, says Michael Stevens, a cotton trader in Mandeville, La., who works for Swiss Financial Services Inc. "Everybody in the industry has been waiting for a correction."

"NOTHING TO SELL." Some experts are eager for a price drop. Prices need to come down, says Merrill, Lynch & Co. analyst Judith Ganes, if the U.S. wants to maximize exports and minimize imports. Already, U.S. cotton exports for 1998-99 are expected to fall 30%, to 5.2 million bales. Current export shipments are strong and imports low, as merchants and mills take advantage of federal subsidies for U.S. cotton. But funding for those subsidies is drying up fast and could be gone by December if cotton prices remain high.

That would make the plight of cotton farmers worse. "Imports are the last thing we need right now," says Buckholts (Tex.) cotton farmer Wilburn Beckhusen, whose 1,100 acres have just been wiped out by the drought. "It doesn't make a whole lot of difference if cotton goes up to a $1 [a pound] if you don't have nothing to sell." For Beckhusen and most other U.S. cotton farmers, a softer cotton market can't come too soon.

By Stephanie Anderson Forest in Dallas

TELECOMMUNICATIONS

THIS HOOKUP ISN'T RINGING ANY BELLS

A Philips-Lucent cell-phone venture falls short of its promise

It was supposed be the Dream Team of the cellular industry. Last October, Philips Electronics and Lucent Technologies Inc. created a joint venture that, they promised, would be a new powerhouse in wireless gear. Lucent would combine its technological expertise with Philips' brand name and distribution deals. And Philips Consumer Communications—60% owned by Philips and 40% by Lucent—would challenge the dominant players, Motorola, Nokia, and L. M. Ericsson. "The joint venture gives the new PCC the technology, distribution channels, and brand recognition that no other company in this market can match," crowed the joint venture's CEO, Michael McTighe, as he launched PCC.

So far, though, PCC is anything but the sensation the partners promised. Executives have stumbled badly in turning Lucent's research into commercial products. Current and former employees say Lucent's technology was not as close to market-ready as expected, and engineers have found developing digital phones more difficult than anticipated. In the U.S., PCC has only two wireless phones on the market—compared with more than a dozen for Motorola and Nokia. And analysts and phone companies say neither is selling well.

"BIT OF A MESS." Turmoil in PCC's executive ranks also has contributed to the slow product development. Six of the top 12 managers have left in the past 10 months, including the general managers for the Americas, Asia-Pacific, and Europe/Middle East/Africa regions. Osmo Hautanen, a former Nokia exec who was PCC's general manager for the Americas, says he felt the venture's centralization hurt its ability to introduce top-flight products quickly. "After the joint venture took place, I absolutely disagreed with the direction of the company," he says.

What's more, PCC is hemorrhaging money. The company, which also sells traditional phones, cordless phones, and answering machines—some with the AT&T brand name—is approaching $3 billion in revenue. But its wireless business is cutting into earnings. After telling analysts he expected to turn profitable by the end of 1997, McTighe reported a loss of about $60 million in last year's fourth quarter and $150 million in the first quarter of 1998. As Philips prepares to report second-quarter results on July 21, analysts are bracing for more bad news. "It's really a bit of a mess," says Anita Farrell, an analyst with Merrill Lynch & Co.

Enough of a mess that analysts are questioning PCC's future. If the venture continues to lose money, Philips President Cor Boonstra, a bottom-line-oriented manager, may reconsider the wireless initiative. "They won't let this become a black hole," says Farrell. A spokesm for PCC acknowledges the late prod introductions, executive departures, a losses, but says those are normal gro ing pains. Philips "has full confidence us," says the spokesman.

Philips' patience, however, is sur being tested by the venture's product velopment problems. PCC was suppos to ship a new digital phone to AT Wireless about a year ago. But qual problems delayed commercial shipme until early 1998, according to a AT&T executive. Even now, AT says, Nokia's new phone is mu more popular than anythi else it carries. "Everything taking a backseat to Noki says a spokesman. Philip Lucent announced last Se tember that it is maki digital phones based on different technology, but spokesman says PCC cannot y estimate a date for commerc shipments.

PCC's difficulties are rare misstep for Luce Since the telepho equipment maker w spun off from AT&T in 1996, its sto has soared more than sixfold to $90. A though its share of PCC's losses wo put a serious dent in its $500 million profits, Lucent depends on the ventu to get its consumer strategy off t ground. A Lucent spokeswoman says is "still convinced that our ventu makes strategic sense."

Even if PCC stops making wirele phones, Philips is likely to stay in t business. Boonstra believes wirele communication technology will mer with other electronics products. Phili could resell phones—as it did under arrangement with Nokia before 199 Or it could try to bu the mobile-phone bus ness of a player such Motorola Inc., which h seen its stock drop 40 in the past year. Mot ola declined comment.

For now, though, P is far from McTigh goal of becoming one the top three wirele phone makers by 200 "I think they've lo out," says Dennis Exto a telecom analyst wi Nikko Securities Inte national. So much for t Dream Team.

By Peter Elstro in New Yo

On the Bottom Rung

1997 worldwide market share in wireless phones

PRELIMINARY DATA

MOTOROLA	22%
NOKIA	21
ERICSSON	16
PANASONIC	7
QUALCOMM-SONY	5
NEC	4
SIEMENS	4
ALCATEL	3
MITSUBISHI	2
PHILIPS-LUCENT	2

DATA DATAQUEST INC

COMMENTARY

By De'Ann Weimer

DON'T BE SHOCKED BY SURGES IN THE PRICE OF POWER

n late June, Steven R. Teitelman, he vice-president of trading for Newark (N.J.)-based Public Ser- e Enterprise & Group Inc., smug- old a British electric-industry ex- tive that deregulation of the U.S. ctricity market was proceeding in orderly fashion. The U.S. market uld never see prices for electricity ke as high as $1,000 a megawatt- ur, as they had in Britain. It was stable—$300 per megawatt-hour uld be about tops.

Oops. Within days, a Midwest heat ve left the U.S. wholesale elec- ity market scrambling for power. pair of energy trading companies

Cost spikes are part of a deregulated electricity market. As such, they have a role to play

'aulted on delivery contracts, trig- ing a stampede as companies that l contracts to resell energy from brokers scrambled to cover mselves. For eight hours, Chica- based Commonwealth Edison Co. l to pony up $5,000 per megawatt- ur to buy juice on the spot mar- —more than 100 times the regu- price. For one hour, it actually id $6,000. The strapped utility cut wer to manufacturers and begged stomers to conserve electricity.

WER PLAYS. The traumatic episode s led to calls for reregulation of ctricity prices, including caps dur- r periods of supply-demand imbal- ce. Fear of large-scale power out- es is prompting politicians, such as S. Senator Richard S. Durbin (D-), to wonder aloud if the market is coming unreliable and poses a reat to public health and safety. It was a frightening time, all right.

The national transmission grid—usually a seamless web of interconnections among utilities—suddenly unraveled in part because market forces were undermining the cooperation the system requires. But reregulation is not the answer. Volatile pricing must be expected in a market that's just opening up to competition. The same thing happened in natural gas.

Making the decision to deregulate means we will accept the occasional freakish price spike as a trade-off for having lower prices for power most of the time. Establishing arbitrary caps would only suppress market signals—depriving buyers and sellers of the information required to make calls about where to invest and improve the system.

To be sure, the market is far from perfect. Power producers can deliberately withhold electricity to drive up the price, and some customers suggest that's what happened in June as some producers tried to undermine deregulation. "I'll tell you what happened: The empire struck back," says John R. Hughes, technical affairs director for the Electricity Consumers Resource Council, a coalition of large users of electricity. "They will do anything to protect their monopolies."

The Federal Energy Regulatory Commission says it is looking into the behavior of several utilities, including American Electric Power, whose parent company, AEP Corp., owns many of the transmission lines leading into the Midwest. AEP admits that it broke a contract to provide 1,300 megawatt-hours to Commonwealth Edison. But AEP's executive vice-president for finance, Henry W. Fayne, says the company did nothing wrong. He says it had an unusual number of plants out of commission and needed the transmission capacity to serve its own customers.

TRAFFIC CONTROL. That's for regulators to decide. And for that matter, it is for them to make sure that owners of the transmission grid can't hold customers and competitors hostage by exploiting artificial bottlenecks to drive up prices or prevent access to alternate power sources. The solution: an expanded network of independent system operators, similar to one established on Mar. 31 in the deregulated California market. These ISOs' job is to avoid brownouts and blackouts by acting like air-traffic controllers for electricity. In California, the ISOs have maintained reliability even though that state, too, has experienced price spikes.

Such hikes are not always bad things either. Thanks to the June price spike, it's likelier that an independent power producer will be willing to spend $100 million to build a new gas-turbine generating unit close to Chicago, points out Kenneth Rose, an economist with the National Regulatory Research Institute. Says Commonwealth Edison's Paul McCoy, the senior vice-president who bought the costly juice last month: "If we expect independents to build units and be able to recover their costs, there have to be some hours where there is going to be a healthy market."

Ultimately, the goal of deregulation is not to avoid price spikes at all costs but to create a reliable, low-priced electricity infrastructure through competition. Price volatility, unsettling as it is, simply comes with the territory.

Weimer follows electricity deregulation from Chicago.

TURNAROUNDS

FINALLY, A GOOD KODAK MOMENT

The second quarter shows the payoff from massive cost cuts

For months, investors have been fretting that Eastman Kodak Co. CEO George M. C. Fisher might be too much of a "Mr. Nice Guy" to revitalize the fading film giant. But Kodak's July 15 announcement that its second-quarter earnings soared 35%, to $495 million, or $1.51 a share, may have allayed those fears.

The profit results—which far exceeded Wall Street's expectations—stemmed almost entirely from Fisher's brutal attack on the company's bloated cost structure. So far this year, Fisher has slashed 7,600 jobs and reduced costs by $350 million, boosting Kodak's operating profit margin to 18.5% of sales, from 14.3%. Those numbers "pretty well blew the entire bear camp out of the water," says Alex Henderson, an analyst at Prudential Securities Inc. Indeed, as a result of the news, Kodak's stock surged nearly 12%, to a 52-week-high of 82½.

CEO FISHER: *Now, if he can only get sales going...*

Still, it's too soon to conclude that Fisher will bring about the turnaround he promised when he arrived in Rochester in 1993, fresh from his widely heralded reign at now-reeling Motorola Inc. Fisher's goal is to make Kodak a growth company once again. But for all the good news on earnings, Kodak's sales dropped 8%. Even factoring out the effect of the strong dollar on foreign sales, overall sales were off 1%.

Perhaps most troub
for Fisher's strategy, s
were also disappointin
markets he's counting on
growth: emerging econo
and digital imaging. Tha
to the continuing Asian fi
nancial crisis, sales in em
ing markets plunged 1
And the red ink just k
flowing in the digital b
ness, where sales decli
5%, and Kodak lost ano
$64 million. "Nobody has
clared victory," conce
chief financial officer Ha
L. Kavetas. "We still ha
long ways to go."

Near term, Kodak's e
ings should continue to
prove: Fisher promises
cut 12,300 more jobs by 2000 and b
annual savings to $1 billion. That
help Kodak "withstand aggressive p
ing challenges" from Fuji Photo F
Co., predicts Peter Enderlin, an a
lyst at FAC/ Equities. Indeed, Kodak
peared to check its market-share
to Fuji in the second quarter. But u
Fisher produces sales growth, his tu
around won't be in the can.

By William C. Symo
in Bo

AEROSPACE

COURSE CHANGE AT BOEING

It's hiking prices as it puts profits ahead of market share

Boeing Co. has filed a new flight plan. When airlines come shopping for planes at the Seattle aerospace giant this summer, they'll find the sticker price for most models has jumped 5%—something new for customers that long have watched gleefully as Boeing offered deep discounts to keep Airbus Industrie from stealing customers. Boeing had done so well racking up orders, in fact, that it wound up with a huge production bottleneck that is costing it billions to untangle.

Now, management is trying to reverse all that. "Overall, profits are more important than market share," says Boeing Commercial Airplane Group President Ronald B. Woodard.

The new tune seems to be cheering up Wall Street somewhat, where Boeing's stock has been pummeled since the production started producing massive write-offs and delayed deliveries last summer. The company's shares rose to 49⅜ on July 15, up 1⅜ from their level before the price increases were announced July 10. "Boeing is realizing that in this business it is not worth owning the last 10%," says Nicholas Heymann, an aerospace analyst with Prudential Securities Inc.

Boeing skeptics, however, say that the hikes are too little, too late—and might even disappear when Boeing g
into the thick of negotiations. "It's m
form than substance," says Peter S.
cobs, analyst with Ragen McKenzi
Seattle. For instance, in the hotly
tested $1 billion order from British
ways, Airbus initially seemed to ha
lock. BA's recent hesitation has convi
Boeing that it has a chance, and
cording to industry insiders, it ma
offering discounts to get the busine

In any case, the sticker price
won't fatten the bottom line until 2
when planes sold at the higher pr
start rolling off Boeing's clogged
sembly lines.
company's real p
lem still remains
profit margins on
planes that it is fi
ing today. When
company reports
ond-quarter earni
on July 23, anal
expect Boeing to
nounce a net profit potentially as lo
$25 million and no higher than $47 i
lion. Either would be well below
$55 million earned in 1997's quarter.
if Boeing stays the new course, it c
land bigger profits—eventually.

By Seanna Browder in Se

CLOGGED ASSEMBLY LINE Production snarls resulted in write-offs and delays

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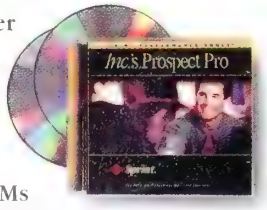

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In Business This Week

EDITED BY KELLEY HOLLAND

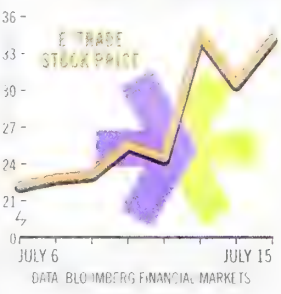
A NEW LAWSUIT FOR BIG TOBACCO?

IF AT FIRST YOU DON'T SUCceed.... The White House is considering a lawsuit against the tobacco companies to recoup Medicare spending on smoking-related illnesses. State actions to recover Medicaid outlays prompted the tobacco companies to negotiate a proposed settlement in 1997. But the tobacco companies recently abandoned the settlement because they objected that protections against their liability were being watered down. Congress has all but killed the bill. Tobacco companies are now negotiating with individual states to settle their lawsuits. Richard A. Daynard, chairman of the Tobacco Products Liability Project at Boston's Northeastern University School of Law, says a federal suit would be "quite wonderful," but such a threat "might have been more effective a couple of months ago, before the tobacco industry had nothing to lose by killing the bill."

CLOSING BELL

E*TRADE'S COUP

Among Internet stocks, mere rumor can send shares soaring. So when real news hits, look out. On July 13, Net broker E*TRADE's stock rocketed 41%, to 34½, thanks to a $400 million investment by Japan's Softbank. It's not just the money investors liked: Softbank has big stakes in leading Net portal Yahoo! and publisher Ziff-Davis, so E*TRADE can reach millions more potential customers. Plus, the cash will let E*TRADE buy other companies to become a full financial-services destination.



JUSTICE APPROVES WORLDCOM-MCI

AFTER NINE MONTHS OF wrangling, the Justice Dept. O.K.'d the $37 billion WorldCom-MCI Communications merger on July 15—a week after the European Commission approved it. Both signed off after MCI promised to sell its Internet business to Britain's Cable & Wireless for $1.75 billion. Authorities feared MCI-WorldCom would dominate the Net-backbone market. Now, nods are expected from the Federal Communications Commission and the states by late summer. After the merger, WorldCom will catapult from No. 4 to No. 2 in the long-distance market.

TOYOTA STEERS THE PRIUS WEST

TOYOTA WILL EXPORT ITS PRIUS compact car, which is powered by a combination of gasoline and electricity, to North America and Europe in 2000. On July 14, the auto maker announced that it wants to sell 20,000 of the Prius cars annually in North America and Europe combined. Toyota has sold 7,700 Prius models in Japan since it launched the model last December. Corporations and government agencies have snapped up 40% of them, mostly over-40 individuals buying most of the rest. But the company has been selling the Prius for below cost. Toyota is aiming to improve the car's breakeven point by selling more overseas.

HEADLINER: WALTER FORBES

A PROBE CASTS A PALL

Cendant Chairman Walter Forbes says he'll keep his job—even though some investors want him out. On July 14, Cendant said accounting irregularities will knock about $200 million off '97 earnings. An ongoing probe has revealed that CUC International, which Forbes ran before merging it with Henry Silverman's HFS to create Cendant, was booking fictitious revenue as far back as '95. The stock dived nearly 17%, to 15$^{11}/_{16}$, on July 14—62% off its 52-week high. "More than 50% of CUC's 1997 net income was not there, either due to accounting error or fraud," Silverma says. "This has cost me $ billion."

Forbes says he had role in any wrong doing and will s become CEO in 2000. But Ha Utsch, president of Kaufmann Fund, which holds 12 million shares, says: "He will go down in history as playin a major role, directly or indirectly, in perpetratin the biggest fraud of this decade." Says another bi shareholder: "He's gone." Any action by Cendant's board is unlikely until th accounting investigation completed in August.

By Amy Barr

CS FIRST BOSTON'S RAID ON DEUTSCHE

IF DEUTSCHE BANK'S U.S. SUBsidiary had been hit by a meteor, it probably wouldn't have left a crater as wide as the one announced on July 14. More than 100 employees in Deutsche Bank's technology investment-banking division decamped for Credit Suisse First Boston, following the lead of superbanker Frank Quattrone, who jumped to the New York firm on July 1. "This is like an acquisition, but it reduces overhead and layoffs," gloats one Credit Suisse First Boston exec.

A SHOT IN THE ARM FOR 3COM

BELEAGUERED NETWORKING giant 3Com scored a recruiting coup on July 15. The company announced that PC industry veteran Bruce Claflin will join 3Com as presi and chief operating offe reporting to Chairman CEO Eric Benhamou. Cla 46, most recently a top at Digital Equipment, n his name at IBM by launc the successful ThinkPad of notebook computers. 3Com, which has sufferec clining earnings since takeover of U.S. Robo Claflin's operational skills renown for courting tomers could be a m needed shot in the arm.

ET CETERA . . .

- Think profits: Apple re ed a third consecutive p itable quarter.
- Pointcast pulled its pla IPO, citing a desire to pu other strategic options.
- Alcoa plans a new rou cost cuts to eventually expenses by $1.1 billion.
- Olsten plans to buy up to 5% of its stock and its dividend 43%.

'ED BY OWEN ULLMANN

EEKING GEEKS BEARING GIFTS, HE GOP COURTS SILICON VALLEY

the new Republican Mecca. Barely a week goes by thout top Capitol Hill Republicans making the pilgrimage Silicon Valley. On June 30, House Speaker Newt Ging- (R-Ga.) met a group of CEOs at 3COM Corp.'s Santa Clara f.) headquarters, pledging his support for raising visa al- ents for foreign high-tech workers. And GOP pols are ing over each other to hold fund-raisers in Geeksville. hat's going on? Republicans are belatedly trying to er six years of assiduous courting of the Valley by New omy hotshots Bill Clinton and Al Gore. Fearing that the n's most dynamic industrial region turn into prime Democratic turf, GOP is racing in to plant its flag. kind of like watching the Oklahoma rush," marvels Dan Schnur, a GOP er to Technology Network, or Tech- a year-old political action committee ed by such power brokers as Brian , CEO of National Semiconductor. rtainly, as Washington becomes more involved in the information- nology business, the GOP sees the y as a source of megabuck cam- donations. But it's more than that. blicans want to rub shoulders and ideas with the titans of this new power center. And want to prevent the Dems' getting a virtual lock on al- nces, as they have down the coast in Hollywood.

BILL AND NEWT: *Common ground?*

E SONG. Republicans think they have an economic mes- that resonates with libertarian-minded computer and vare execs. "We're the party that speaks for free enter- , less government regulation, and lower taxes," says resentative Robert Goodlatte (R-Va.), who has been ed by Gingrich to head a GOP task force that is reaching o industry officials. Indeed, Republicans and Valley execs been singing from many of the same hymnals for some . In 1996, for example, Clinton caved in to trial lawyers and axed securities-reform legislation that makes it harder for shareholders to bring class actions—often against high-tech startups. The GOP Congress overrode his veto.

GOP leaders also point to a number of tech-friendly bills they're pushing—often with little or no help from Democrats. For example, Senator Spencer Abraham (R-Mich.) is the key sponsor of legislation to increase high-tech worker visas from 65,000 to 95,000 for the rest of this year and 85,000 a year thereafter, a top TechNet priority. The White House, egged on by organized labor, opposes lifting the cap. And Republicans have taken up the industry's long quest to force the Clinton Administration to loosen export curbs on powerful encryption software.

Silicon Valley execs are starting to take note of the Republicans' push. "They're doing much better now than they were a year ago," says John T. Chambers, CEO of networking giant Cisco Systems Inc. Adds Chambers: "[The region] is up for grabs."

The GOP's timing is dandy. The Justice Dept.'s antitrust assault on Microsoft Corp. has shifted high tech's attitude toward Washington from "don't bother me" to "let's deal." Companies are rushing to hire lobbyists and improve relations with Capitol Hill. "The government is going to be involved in what we do; you can't ignore it," notes Floyd Kvamme, a partner in the venture-capital firm of Kleiner, Perkins, Caulfield & Byers in Menlo Park.

Still, many Silicon Valley folks find the agenda of GOP social conservatives tough to swallow. The GOP hopes to overcome that handicap by stressing economics. Republican pols may never close the culture gap, but they're determined to prove that they can do business with the Valley.

By Amy Borrus, with Linda Himelstein in San Mateo, Calif.

CAPITAL WRAPUP

ORKER CONTROL? NO WAY

The AFL-CIO is going on the offen- e this summer to slow the move vard Social Security privatization. me 200 union officials are leading rkplace meetings to rally the ops against what Big Labor sees as first step toward dismantling cial Security—private retirement counts controlled by workers. Come ptember, labor plans to deploy a ass-roots campaign and radio blitz oppose congressional candidates o favor privatization.

GOP LEGAL HARDBALL

▶ Call it the GOP's "subpoena strategy." Hill Republicans have been keeping the Democratic National Committee tied up in legal knots. In the past 18 months, the DNC has been hit with 47 subpoenas for testimony and records in connection with allegations of Campaign '96 fund-raising abuses. Two have been filed just in the past week. The flurry of subpoenas has upped the Dems' Donorgate-related legal fees to $13.6 million—and kept the party in the red.

CLINTON'S NLRB GAME PLAN

▶ President Clinton wants to avoid a nasty Senate confirmation scrap over a replacement for National Labor Relations Board Chairman William B. Gould IV, who exits in August. One possibility: bypass a Hill grilling by naming board member Sarah Fox, a former aide to Senator Edward M. Kennedy (D.-Mass.), as chair. Clintonites say the President may also fill the vacancy temporarily with a union-friendly hopeful while the Senate's in recess.

JAPAN

'I HATE THE LDP'

Japanese voters sent the party a message. Will it get through?

They lined up politely at the polls, patiently waiting to cast their ballots. No boisterous demonstrations. No fiery rallies. Just ordinary men and women, many with children in tow, participating in what looked like a routine election.

Yet the voting for the Japanese Upper House on July 12 turned out to be anything but routine. By dealing a major defeat to the ruling Liberal Democratic Party and forcing the resignation of Prime Minister Ryutaro Hashimoto, voters aimed a blast of anger at the ruling elite. Now, the politicians are frantically trying to figure out how deep and dangerous this anger really is. "The LDP doesn't have much popular support," admits Shigeru Kasuya, a senior party member. "If we're not careful, we could suffer [in the next election]."

Such popular outbursts are not new: The Japanese electorate punished the LDP in both 1989 and 1993, only to drift back into the party's camp. But in both those earlier episodes, the issue was corruption. This time, the overwhelming concern is the deteriorating economy, which is potentially a much more powerful rallying point than party scandal. If the politicians don't get the message and do something about the economy fast, voter ire could easily erupt again.

This time, there's also a new party that could give voters a vehicle to vent their feelings: the Democratic Party of Japan (DPJ), headed by the popular Naoto Kan (box), a former Health Minister who exposed the role of bureaucrats in a scandal of HIV-tainted blood. His party increased its seats in the Upper House by nine, for a total of 27. "The voters have given us a chance," says Kan. He wants to force a general election quickly and start a public debate on how much reform the Japanese want and how much pain they are prepared to endure. In an Asahi poll right after the election, 54% of those polled said they wanted a general election as soon as possible.

"TOTALLY INCAPABLE." The economy is certainly providing voters plenty to worry about, especially in urban districts. The LDP failed to win a single seat among the most populated constituencies of Tokyo, Osaka, and Kanagawa, as well as 15 other electoral districts. Not since 1965 has it failed to capture a seat in the capital. "I used to back the LDP, but they've proved to be totally incapable," says Kuni Fukuda, a 52-year-old Tokyo housewife.

It's in the cities and their industrialized suburbs where voters feel the most anxiety about the economy. Unemployment, officially at 4.1%, is at a record high. But the real level is probably closer to 6%, since the government is classifying some recently laid-off Japanese as "resting" from work. Corporate bankruptcies [illegible] by nearly 30% in the first half of 19[illegible] record level in the postwar pe[illegible] That's a big concern for job-hunting [illegible] dents such as 21-year-old Akiko [illegible] modaira, who voted for the first tim[illegible] for the DPJ. "I hate the LDP becaus[illegible] they're destroying the country," sa[illegible] Shimodaira.

Hashimoto's recent performance [illegible] not help, waffling as he did on whe[illegible] a tax cut would be permanent. "[illegible] the worst Prime Minister we've [illegible] had," says Yoko Matsunaga, 5[illegible]

KAN *A call for general elections*

NAOTO KAN: LET THE VOTERS DECIDE WHO SHOULD 'DO THE SURGERY'

Naoto Kan, popular leader of the Democratic Party of Japan (DPJ), is one of the few Japanese politicians pleased with the outcome of the July 12 Upper House elections. His pro-reform party increased its seats from 18 to 27, giving the 51-year-old Kan new clout to battle the Liberal Democratic Party (LDP). In Tokyo on July 14, he spoke with BUSINESS WEEK correspondent Irene M. Kunii.

Q: *What do you think of the el[illegible] outcome?*

A: I'd been hoping for favorab[illegible] but I didn't expect that they w[illegible] this good. A high voter turnou[illegible] best thing that could have hap[illegible] Japanese democracy.

Q: *How does the outcome affe[illegible] DPJ?*

A: The DPJ is now an oppositi[illegible]

ans watch a live, large-screen broadcast of Hashimoto's resignation

away," laments Trade Minister Mitsuo Horiuchi.

The LDP is also reassessing its "bridge bank" plan to dispose of at least $550 billion in bad loans. It was scheduled to be presented to a special session of parliament in late July, but that is now likely to be delayed until mid-August at the earliest. Koichi Kato, LDP secretary-general, has indicated that his party may have to revise the plan in order to win the cooperation of some opposition groups in the Upper House, which can block the passage of most bills.

DIM LIGHTS. Top LDP candidates to succeed Hashimoto hardly look like ideal leaders in a crisis. The main contender is Keizo Obuchi, 61, the quiet, plodding Foreign Minister who heads the largest faction of LDP politicians. He is drafting a reform plan to attract the support of LDP rank and file. Another is Seiroku Kajiyama, a behind-the-scenes player who wants more public-works projects—not the kind of step that will permanently fix things. A distant third is Health Minister Junichiro Koizumi, whose radical ideas alarm party elders.

As the politicians maneuver and LDP elders choose their next leader, Japanese voters will be watching for a sign of decisive action. They may not get it. But they will have more chances to voice their anxiety—and strike fear in the heart of the Establishment.

By Irene M. Kunii in Tokyo

urant owner who also cast her bal-
r the DPJ. City voters, too, resent
way the LDP has channeled their
evenues and savings into pork-
l projects for rural constituencies
ailouts for badly managed banks.
practice was accepted in good
s. But with recession settling in
the bank crisis spilling over into
eal economy, this waste of funds is
ing too much to bear. "Japanese
their country is doomed, like the
ic," says Takamitsu Sawa, head of
o University's Institute of Eco-
nomic Research. "The LDP only caters to vested interest groups, neglecting the rest of Japan."

The best thing that could happen now is if voters force politicians to mount a rapid attack on Japan's economic ills. The worst outcome is a kind of paralysis setting in, with opponents such as Kan powerful enough to harass the LDP but not strong enough to redirect policy yet. Already, there's concern that political confusion will derail the $115 billion stimulus package Hashimoto unveiled in April. "A recovery is now further

onfront the LDP. We have to
ind that the voters weren't
eir ballots in support of the
ather to punish the LDP. Still,
have given us a chance.

u work with the government
conomic legislation, such as a
tax overhaul and the "bridge
n?
not possible. I believe that
old a general election as soon
e on the issue of economic re-
t way, the parties can present
proposals and let the voters
hoever the LDP picks to suc-
imoto as Prime Minister will not have the approval of the people. Japan is facing a serious crisis and needs to go through painful economic reform. I think voters should choose whom they want to do the surgery.

Q: *Some critics say that an early general election could deepen the economic crisis. Is that a concern?*
A: The people are going to rebel if the government carries out tough reform measures without their approval. Some say that we'd create a political vacuum if we hold elections soon. But I feel we'd be creating a vacuum if we don't.

Q: *What should be done about the bad-debt problem in the banking sector?*
A: We've proposed our own plan for a [U.S.-style] Resolution Trust Corp. to take over the bad loans. But Japan has to expose all its bad loans. We don't really know the full extent of the problem, so it should be clarified.

Q: *You still lack a majority in parliament. What do you plan to do to win the next general election?*
A: We could form a bloc with other anti-LDP parties. Or we could just go at it alone, fielding candidates of our own. Whatever route we take, we want to create a political system where voters can choose between two strong parties.

JAPAN

THE SLOWEST FIRE SALE ON EARTH

Japan is the place to buy bad loans–unless you're in a hurry

It's 4 a.m., and Jack Rodman is killing time. Too jet-lagged to sleep, Rodman can only talk on the phone until the gym opens at his Tokyo hotel—the kind of problem you run into when you're director for Asia at E&Y Kenneth Leventhal Real Estate Group. Shuttling between Los Angeles and Japan, Rodman is used to jet lag—and to waiting. For four years, he has been working on deals to sell Japanese bank loans to investors. But it's slow going. "All the pieces are in place for a market," he says. "They keep forgetting one thing: Sell the loans."

The stakes, of course, could hardly be higher. Japanese banks sit on $550 billion or more of bad debts, many of them bad because property offered as collateral has plunged in value. The drama in Japanese finance today is whether a way can be found to clear the books—to find real prices at which loans and property can be sold. "That's the nut that has to be cracked," says Robert D. Hormats, vice-chairman of Goldman Sachs (International). While the Resolution Trust Corp. was able to clean up the U.S. savings-and-loan debacle, Japan lacks a formal mechanism to funnel assets to the market—and indeed is culturally uneasy with such a process.

RISING PRICES. Still, there is activity. Since last year, U.S. and European investors have paid about $2 billion for loan portfolios with a face value of around $20 billion, says Rodman, whose firm developed a widely used pricing model for loan sales and, as a result, keeps close to the action. Some 20 deals have been done, he says, and prices are rising, from 4¢ or 5¢ on the dollar last year to more than 10¢. For Japanese banks, returns are magnified by tax write-offs for loan losses.

And there's no doubting investors' appetite. Rodman reckons foreign heavyweights—Goldman, Bankers Trust, Morgan Stanley, and the like—have assembled $20 billion to buy Japanese loans and property. With U.S. property prices rising, investors figure their best chance for big returns is in depressed Asian markets. At the same time, financial mechanics who honed their skills buying S&L assets are running out of domestic product; Asia represents a greener pasture.

But now the demand for Japanese assets exceeds supply. Says Andrew D. Stone, managing director of Credit Suisse First Boston: "The pace of sales has been much slower than everyone anticipated."

> Foreign heavyweights are lining up, but demand for Japanese assets exceeds supply

It's a tricky business. Simply establishing what collateral goes with which loan can be a matter for private detectives, says Richard Mandel, president of the commercial group at real estate brokers Kennedy-Wilson Inc. "Loan documents," he says, "are very small—just a few pages."

Even when technicalities are ir out, sellers are hard to find—Ma suspects banks have grown uneasy open bidding and are turning to pr sales. And good buildings are sc Stone, for example, wants prope but has only been able to buy loar

Indeed, the jury is out on wh Japan wants large-scale asset sal don't think the government has a ticular concern about sales," says E Carnegie-Brown, managing directo J.P. Morgan & Co. in Tokyo. "I the government wants the bank start lending again."

For his part, Rodman blames Japanese bureaucracy for slowing s Particularly galling, he says, is tha government has set up entities to loans off banks' balance sheets bu not come up with precise mechanis sell loans. "They continue to find shells to hide things under," he sa

But Japan is where the action is ly to be. Low interest rates make l age cheap, and the lack of a pro glut makes a rebound more likely. perceive Japan as toward the bo of the real estate cycle," says S "We can't necessarily make that ment in non-Japan Asian countr U.S. investors, after all, have seen before during the S&L days—the p erty plunge and the eventual r ery. The question is whether will see it in Japan.

By Gary Silver in New

D NOW, E PAIN

Yeltsin meet IMF terms e curbing the backlash?

ris Yeltsin didn't have much hoice. With Russia on the brink f default on $41.3 billion in short- government debt and the ruble usly close to devaluation, he or- l his special envoy, Anatoly ais, to negotiate round the clock essary to carve out a $10 billion to illion bailout deal with the Inter- nal Monetary Fund. As the talks ed on, U.S. officials working be- the scenes calculated that Russia n such bad shape even $15 billion ln't stave off disaster. By July 13, ais and the IMF had cooked up a rsweet deal: $22.6 billion in ex- e for painful austerity.

ltsin was relieved to get his money, ow he has to pay the price. His rnment has no choice but to start ng the serious structural problems g Russia—from a leaky tax system e thousands of enterprises barely ving on barter. At the same time, ia will have to slash its budget gap estructure its debt, forcing compa- to pay their bills or go bankrupt e). All this must take place just as ountry is heading into a new elec- season. The Duma, the lower house arliament, is up for reelection in mber, 1999, while presidential elec- will take place in June, 2000. in's gamble is that his government, since April by 35-year-old Prime ster Sergei Kiriyenko, can imple- t painful reforms quickly so the ceback will start by election time.

D OF WAITING. There's little doubt the next year will be bleak. Coal rs and defense workers are already esting over unpaid wages. Outside ning Moscow, people are tired of ing for the benefits of reform to le down to them. Meanwhile, con- er demand, which drove last year's growth in gross domestic product r a five-year decline, is likely to nk this year as the government es through a 5% sales tax. Planned in Russia's 35% corporate-profits won't take effect until next year, the government is cracking down ax collection now. Interest rates—at 80%—are unlikely to decline to ls sufficient to reignite investment l sometime next year.

iriyenko is putting the squeeze on Russian companies and citizens alike. One target is Gazprom, which the government says owes $2 billion in back taxes. In early July, tax authorities seized summer homes and a fleet of luxury cars owned by the company. Now Gazprom plans to sell assets to raise money to pay back taxes, and it is cracking down on its own debtors, cutting off supplies to electrical utilities that don't pay. If utilities require payment from their own customers, the pressure could trigger an industrial shakeout. Companies that have survived on barter may have to change

TIGHTER PURSES: *A new 5% sales tax is likely to slow consumer spending*

—or go out of business.

The liquidity crunch is already hurting Russia's 1,600 banks. Their portfolios have been demolished by a recent decline in GKO, or Treasury bill, prices. Many banks were forced to sell at a loss to raise funds. Now, the government is planning to cancel weekly GKO auctions and issue longer-term, dollar-denominated bonds instead. That change will wipe out what had been a key source of banks' profits.

Perhaps most important politically, Yeltsin's austerity is sure to put a hole in Russians' pocketbooks. On top of its planned sales tax, the government wants to raise income-tax rates for the bulk of the population from 12% to 20%. And earnings from second jobs and interest income will be subject to a 20% tax. The Communist-dominated Duma objects to some of these proposals, but Yeltsin has promised to implement by decree key measures he can't push through the parliament.

By securing the IMF bailout, Yeltsin has won some breathing room. The Russian President will have to rally support for Kiriyenko as he puts into action measures far more drastic than Yeltsin dreamed would be necessary so far into his presidency. If Kiriyenko succeeds, Yeltsin may have the chance to hand over the reins to a new, reform-minded President in 2000. But much will depend on how the Russians react to the painful medicine they are about to swallow.

By Patricia Kranz in Moscow

YELTSIN'S DAY OF RECKONING

WHAT THE GOVERNMENT MUST DO	ECONOMIC IMPACT
▶ Keep rates high enough to support ruble while converting short-term ruble debt to longer-term dollar debt	▶ Prolong the drought in corporate borrowing and delay economic growth until late 1999 or 2000
▶ Impose a 5% sales tax, while simplifying tax system and cracking down on evaders	▶ Squeeze consumer spending, which had rebounded in 1997, hurting retail and service businesses
▶ Force cash-starved companies to pay utility bills and taxes or face bankruptcy	▶ Trigger a shakeout among enterprises surviving on barter; could push unemployment to 20% by 2000
▶ Cut budget deficit from 5.6% to 2.8% of GDP by next year	▶ Could spark backlash from miners and others who favor higher spending

DATA: BUSINESS WEEK

COLD FEET ON REFORM?

China shifts to quick fixes in a bid to preserve stability

Chinese microwave manufacturer Amproluck Electrics Co. was keen on gaining market share, so earlier this year it slashed prices by a third and jumped into China's vicious price war for electronic appliances. But today Amproluck is a casualty of that war: It is now bankrupt. Not long ago Beijing officials might have applauded such a battle, but now, they fear price slashing will drive more and more manufacturers out of business. So some officials are calling for a ban on steep discounting. While they want to halt bankruptcies, they also want to stem deflationary pressure that may force a devaluation of the currency.

Such is the mood in Beijing these days. With the Asian crisis hitting China much harder than first anticipated, Beijing's leaders are finding their heralded economic reform plans running smack into the reality of a slowing economy. Just a few months ago, reforms such as privatization of housing and state-run factories were proceeding. Now, with declining foreign investment, sagging export growth, and tepid consumer demand at home, momentum for reform is slowing as leaders instead put a premium on maintaining stability.

The souring outlook, especially for exports, is contributing to the pressure on China to devalue the yuan, which it has steadfastly pledged not to do in order to help keep the rest of Asia stable. Instead the Chinese are "trying every conceivable microeconomic measure before biting the bullet and devaluing," says Enzio von Pfeil, chief economist for Clarion Securities in Hong Kong.

Some officials now want to slow down Premier Zhu Rongji's privatization plans, fearing mass unemployment and unrest. They want Beijing's debt-ridden banks to prop up ailing industries and pump money into shaky infrastructure programs. "The statements of top leaders certainly suggest that there has been a shift in attitude," says Yukon Huang, head of the World Bank office in Beijing. For reformist leaders like Zhu, the shifting winds could result in a dangerous loss of political support that could lessen their ardor for painful economic reforms.

Chinese officials had hoped it could withstand the worst of the Asian economic fallout and continue with growth led by exports and foreign investment. That, it's now clear, will be impossible. Economic growth, initially forecast at 8%, is likely to be closer to 6% this year as foreign investment has tumbled. In the first six months, exports have grown at a mediocre 7.6%, a third of last year's rate. Most drastic has been the slowdown in exports to the rest of the region—by 30% to South Korea and 12.9% to Southeast Asia. Meanwhile, prices fell 3% in June, continuing a nine-month slide.

To bolster hard-hit export sectors, the Chinese are trying remedies such as tariff breaks for capital-goods imports, export rebates, easier export licensing, and expanded access to credit. Beijing is print money cover t subsidies, but prices falling, tle inflation be a good th Beijing has accelerated p to stimulate the econ through massive infrast ture investment, poss as much as $250 billion year. Analysts fear, h ever, that efforts to m tain exports and boos frastructure may be wrong use of scarce sources and will allow a industries to postp reforms.

CONFUSED SIGNALS. O the only reforms squa on track is the massive reaucratic restructuring will see Beijing lay of estimated four million ple over the next few y But even that is provin obstacle. With bureauc reeling under a whol reorganization, there's time or impetus for economic refo "If the signals [on reform] become confused, the enterprises and banks start to think it's back to busines usual," says Huang.

Of course investment, even if po placed, will still stimulate the eco to some degree. And given China's sive infrastructure needs, much in ment could ultima prove productive. for now, at least, Asian crisis seems t throwing China's p off course. The Beijing's leaders hope for is that s measures here there can help stav a devaluation and before too long, ref can get back on tr

By Dexter Rober Beijing, with Ja Barnathan in H Kong

Beijing's Remedies

THE PROBLEMS	THE COUNTERMEASURES
GDP growth to be just 6%, lower than the 8% target critical to creating new jobs and staving off unrest	Stimulus measures, including $250 billion government investment in infrastructure projects
Export growth is slowing, from 21% last year to 7.6% in the first half of this year	Increased export rebates, more loans for export credits, easier export licensing
Deflation and low consumer demand are putting pressure on industry	Calls to halt retail discounting to keep up prices and deter cutthroat competition

DATA: BUSINESS WEEK

ED BY JOHN TEMPLEMAN

)NG KONG: THE AIRPORT DEBACLE AY PLAY INTO BEIJING'S HANDS

e nightmarish debut of Hong Kong's $20 billion Chek ap Kok airport has been one big public-relations deba-e. Tales of lost baggage, computer bugs, and decaying have made the former British colony the laughing of Asia. For shipping magnate and Hong Kong Chief itive Tung Chee-hwa, the affair is raising a political n that may linger long after the last crate of bad fish is d away.

ng's flawed crisis management has allowed his critics to the political attack. With popularly elected members of Kong's Legislative Council leading the charge, they emanding a full inquiry into the air-iasco. Academics, business leaders, ro-Beijing politicians are joining the y and insisting that Tung must e the way he runs Hong Kong.

e attacks are an acute embarrass-to the politically inept Tung, who hunned the spotlight since the air-chaotic debut. Tung's withdraw-wever, has left the hitherto highly cted civil service, led by Anson , exposed to damage from the leg-rs. "[The civil servants] are not ac-able to anyone," gripes firebrand politician Emily Lau.

SNAFU: *Did civil servants bungle?*

ETED MANDARINS. A legacy of British rule, the city's of 180,000 bureaucrats underpins Hong Kong's special in its "one country, two systems" deal with Beijing. As ssional civil servants rather than political appointees, are supposedly less susceptible to heavy-handed pressure Beijing. They are paid high salaries, housing allowances, ensions to make them incorruptible, unlike their col-es in such places as Indonesia or China itself.

ng Kong's cosseted mandarins attract envy that makes a choice political target. Critics contend that bureaucrats to please Beijing rushed to open the airport—before its licated systems had been fully tested—to coincide with a visit by Chinese President Jiang Zemin in July. They received further ammunition on July 14, when corruption busters arrested a dozen people and charged them with graft in an airport-related project.

Also damaging to the bureaucrats has been an almost biblical series of plagues that has struck Hong Kong since it returned to Chinese rule last year. First came a deadly strain of bird flu, then a calamitous wave of water pollution. Poor handling of those crises has shaken public confidence in the city's governing elite. "We are seeing the weaknesses of the civil servants exposed," says political scientist Joseph Y. S. Cheng at City University of Hong Kong.

Except for extraordinary misconduct, the bureaucrats can't be fired. But despite all the mistakes, no senior civil servant has been disciplined either. That angers Hong Kong voters, who are suffering as the once buoyant local economy crashes, doubling unemployment rates and halving real estate prices.

Voters already punished Tung in May Legislative Council elections by awarding most seats open to universal suffrage to his prodemocracy opponents. Now, with another election looming in 2000, legislators from both major camps will try to score easy points by attacking the civil service. The pro-China group paints the civil service as an overhang of British rule, while the prodemocracy crowd sees them as autocratic.

It's a dangerous game, particularly for the democrats. With his troubles mounting, Tung may soon need to show Beijing that its opponents aren't gaining overwhelming popularity in Hong Kong. He may now drop his carefully cultivated veneer of impartiality and move openly into the pro-China camp. If he joins the attacks on the civil servants to improve his standing, the city will slip further under Beijing's control.

By Bruce Einhorn in Hong Kong

GLOBAL WRAPUP

STER CRISIS MAY AID PEACE

iolent confrontations between ngemen and security forces at tadown, Northern Ireland, could ance the peace process. The ugly ıdoff has split Protestant fraternal anizations badly. Any weakening he Orangemen, the spine of peace-lement opposition, is a plus for tish Prime Minister Tony Blair, has backed a ban on provocative testant parades.

Efforts to defuse the crisis have ce-ıted a close working relationship of Ulster's First Minister David Trimble, chief of the Ulster Unionists and an Orangeman, and his Deputy, Seamus Mallon, leader of the mostly Catholic Social Democratic & Labour Party. Their collaboration is a key to peace efforts.

U.S. SPOOKS EXPOSED

▶ For years, U. S. spending on intelligence has been one of the nation's best-kept secrets. Forced by a lawsuit to reveal the $26.6 billion total budget last year, the Central Intelligence Agency may try to put it back under wraps. But Washington's Brookings Institute may thwart that effort with a new book, *Atomic Audit.*

The volume grabbed headlines with estimates that the U. S. has spent $5.5 trillion on nuclear-weapons programs. Less noticed was its road map through spy budgets. Deductive math applied to unclassified Pentagon documents shows that the National Security Agency and the Defense Intelligence Agency together spent $4.4 billion on espionage research and operations. A $3 billion CIA spy budget, says Brookings, is tucked away in a bland Air Force budget line called "Selected Activities."

THEY ARE SURROUNDED BY BANANA PEELS.

The way they do business is changing.

Their product line is changing.

Their customers are changing.

Their competitors are changing.

Even the company's name is changing.

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STRATEGIES

SCHLUMBERGER DIGS DEEPER

Will a pricey bid help the oil-field giant keep its lead?

For more than 50 years, Schlumberger Inc. has been a giant of the oil patch. Back in the 1920s, the New York-based company created the oil-services industry when it used electrical resistance to detect oil deep underground. And for decades after, it spent millions to ensure that it was the first to introduce any new technology.

So with consolidation rapidly cutting the number of rivals even as an offshore drilling boom has Big Oil soaking up more services than ever, you'd think Schlumberger would be enjoying heady days. But it's not. Instead, the $11 billion company is facing its toughest competitive situation in years: Not only is it falling behind nimbler competitors more willing to form alliances to expand across the globe, but customers and former executives say it is also losing its once undisputed technological lead. Though the company's surprise $3.4 billion deal for Camco International Inc. on June 19—its largest buy in 14 years—will help, Schlumberger still has a tough road ahead. "[It] is in a dogfight here to maintain superiority," says Standard & Poor's analyst Norman Rosenberg.

SMART WELLS. Indeed, though it remains a critical oil-field supplier and a fierce competitor, Schlumberger risks becoming just one of the pack. When Dallas-based rival Halliburton Co. completes its acquisition of Dresser Industries Inc. in September, it will eclipse Schlumberger to become, with $17 billion in sales, the largest services company. Houston-based Baker Hughes Inc., long a distant third, is growing too. "It used to be we had a philosophy to give Schlumberger the real tough jobs," says Chevron USA Production Co. Vice-President Bruce W. Reynolds. "Right now, we could go to any of those companies."

Schlumberger declined to speak to BUSINESS WEEK on the record for this story, but a top-level executive did respond to written questions on the condition that his name not be used. He denies Schlumberger is falling behind. "We have nothing to feel bad about," he says.

Perhaps, but bigger rivals are only the beginning of Schlumberger's problems. After a four-year oil-services boom, analysts now predict that the big oil companies will chop exploration and production budgets 15% next year. That could slow Schlumberger's earnings growth to 13%, to $1.6 billion this year, from a gain last year, estimates First Call C

More worrying, customers and for executives say, is that Schlumberge losing its pivotal technology edge. look at service, technology, safety, price," says Lavele L. Frantz, Phi Petroleum Co.'s vice-president for ling, production, and technology. "T just have not been the winners of t competitive bid situations."

One area that's particularly crit the ability to build so-called smart w which can be monitored and contro remotely. Oil companies have begu install these high-tech wells, which expected to become the norm. Alre rival Halliburton has sold 13 to An Corp. But customers and investors Schlumberger doesn't have the techn gy to build them. "There's no do when you look at its suite of produ they were lacking," says Ken Miller, ecutive vice-president of Cambridge vestments Ltd., an energy hedge fu

Worse, the smart wells pose a dau ing challenge to Schlumberger's old and most profitable oil-field divisi Wireline & Testing. The unit drops e trical sensors into wells to meas pressures, temperature, and volume. day, Schlumberger controls 65% of $4 billion market for wirelines; the accounted for roughly 30% of the c

EUAN BAIRD'S CHALLENGES

Schlumberger's CE is making change and facing risks

CULTURE Forcing highly autonomous divisions to collabo rate is the biggest culture shift in the company's 50-year history

ACQUISITION Having twice fumbled big acquisitions, Schlumberge must make its $3 billion Camco deal fit into its new worl

MANUFACTURING Growing competitio from newly enlarge rivals has Schlumberger returning to manufacturing oil-field gear

s $1.3 billion in 1997 profits. But
; wells are now able to perform
tasks as well as wirelines.
e Schlumberger executive denies
ompany is lagging. Asked about
wells and other new developments,
ed tools such as magnetic-resonance
rs, which Schlumberger has spent
ars developing. It is "way ahead of
ompetition technically," he says.

NG STOCK. Yet the stiffer compe-
is clearly forcing Schlumberger,
had long preferred to solve its
rch and development challenges
ially, to look outside for help. An-
say that's why it has turned to
o—which specializes in a new class
ls needed to complete smart wells.
f the bid makes strategic sense, it
late in the industry consolidation.
ts high price tag spurred a sell-off
sank Schlumberger's stock to 65¾
ly 13—its low for the year.
reover, if the Camco deal solves
roblem, it could easily open others.
starters, Schlumberger has had a
track record managing big acquisi-
and it has tended to buy at the
of its cycle. Camco also marks a
n to heavy manufacturing, hardly
mberger's forte. Its sole other
facturing unit—Measurement &
ms, which makes electrical and gas
rs—has long underperformed.
st seriously, says Steven Mele, a
er Schlumberger executive now
Standard Chartered Bank, a key
anization that CEO Euan Baird
hed early this year may distract
ompany as it absorbs Camco. With
ederation of highly autonomous
uct and service companies, Schlum-
er has proved ill-equipped to meet
mers' increasing demand that sup-
act as general contractors. Rather
simply selling standardized equip-
needed for a given task, the oil
anies want Schlumberger and its
to provide a customized bundle
oducts and services for each pro-
Baird has announced a series of
ges—including retraining 65,000 em-
es—intended to instill a more co-
tive culture.
spite Baird's many challenges, in-
rs are hardly writing off the com-
It continues to boast operating
ins of 17%—the best in oil ser-
. And even after the recent stock
t enjoys a price to earnings ratio of
0% higher than the industry aver-
"I wouldn't bet against Schlum-
er," says Zia Mian, vice-president
senior energy analyst at Northern
Co., which manages funds holding
mberger stock. Still, as it struggles
aintain its traditional lead, it's
mberger's turn to play catch-up.

By Gary McWilliams in Houston

MAKING SEISMIC WAVES IN THE OIL FIELD

In 1991, Reidar Michaelsen, CEO of Petroleum Geo-Services, set about building a world-class oil-services company from scratch. With the help of two former top executives at Schlumberger, the Norwegian venture capitalist launched an Oslo-based firm that would specialize in searching for buried oil fields beneath the world's oceans.

Today, Petroleum Geo is not only the fastest-growing company in the hot market for oil-field production services but it also has become a major rival to Schlumberger in one of that company's most important markets. As major discoveries in the Gulf of Mexico, off the coast of Africa, and elsewhere have driven demand for offshore seismic searches, the upstart company has nabbed 26% plus of the now $2 billion market—virtually equal to Schlumberger's 28%. And the best may be yet to come: With the introduction of four-dimensional seismic data gathering next year, Michaelsen says: "We're four years ahead of the others."

CAUGHT NAPPING. It's not a boast to be taken lightly. "Everything they've said they would accomplish, they have," says Kurt Hallead, portfolio analyst at energy hedge fund Cambridge Investments Ltd. A $1,000 investment in the company's U.S. public offering five years ago is today worth $19,500. Prudential Securities analyst Jeffrey R. Freedman expects operating profits to soar 69% this year, to $206 million from $122 million in 1997. Sales should rise 78%, to $920 million, after recent acquisitions.

Petroleum Geo succeeds by pushing technology to the limit. It was the first to outfit its vessels with onboard supercomputers. And its innovative, triangular-shaped ships can operate in rougher weather and survey as much as twice the area covered by more conventional vessels. Together, the moves have cut in half the time it takes to survey a parcel of the ocean floor.

Petroleum Geo also pioneered towing multiple recording devices to increase the data in each seismic snapshot. Its ships drag up to 12 listening devices to capture echoes of sound waves sent to the ocean floor in search of oil. Rivals use only six to eight such devices. "In the seismic market, PGS caught the big guys napping," says Hallead.

VIKING EXPLORER
PGS equips its triangular vessels with supercomputers

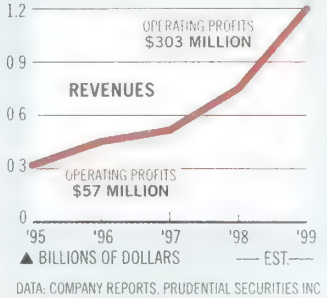
Now Michaelsen is diving into a whole new business: managing oil-well production for such companies as British Petroleum Co. and Conoco Inc. Combining its seismic know-how with production services, Petroleum Geo can significantly boost oil extraction by monitoring flows and manipulating slow pumps. In many cases, the company gets a cut of the additional oil they can coax above the expected production.

That's why Michaelsen paid $890 million in May to expand this business by buying Atlantic Power Group, a specialist in production services. But despite the potential payoffs, the deal has big risks. It brings Petroleum Geo's debt up to par with equity and leaves little room for any possible slowdown in deepwater drilling. Nevertheless, Michaelsen insists long-term, 5-to-10-year contracts mitigate the risks.

Competitors are trying to catch up, but co-founder and President Bjarte Bruheim, former head of Schlumberger's U.S. seismic drilling, says Petroleum Geo has something no one can emulate: its Viking roots. "Norwegians are the world's best seamen," he says. And for oil, the sea is the place to be these days.

By Gary McWilliams in Houston

PGS's GROWTH SPURT



DATA: COMPANY REPORTS, PRUDENTIAL SECURITIES INC

ANTITRUST

JUSTICE'S CARTEL CRACKDOWN

It has 25 grand juries looking into international price-fixing

It sounds like the plot of a paperback thriller. Top executives from competing companies in the U.S., Germany, and Japan jet around the world holding clandestine price-fixing meetings at glittering world capitals. Carving up the world market in a key industrial commodity, they agree to limit production and avoid unnecessary competition. Keeping their activities secret, even from fellow employees, the execs use code names when talking to each other on the phone.

This isn't fiction, though. The Justice Dept. charges that leading manufacturers of graphite electrodes, an important component in steel-mill machinery, followed this script for several years. After a multiyear investigation, the agency joined European authorities in a simultaneous raid on the conspirators' facilities in three countries in June, 1997, and succeeded in breaking up the cartel. In April, UCAR International Inc. in Danbury, Conn., agreed to pay $110 million—the largest fine in antitrust history—for its role in the conspiracy. Japan's Showa Denko K.K. has also admitted participating in the cartel, and Carbon/Graphite Group in Pittsburgh was granted immunity from prosecution in return for helping the Justice probe. At least five other manufacturers are under investigation by U.S., Japanese, and European Commission antitrust authorities.

The case is just the latest of a recent spate of big-time global price-fixing prosecutions. On July 9, Justice launched a criminal suit against former Archer Daniels Midland Co. executives Michael D. Andreas, Mark E. Whitacre, and Terrance S. Wilson in the highest-profile price-fixing case yet. The ADM lawsuit may be getting the headlines, but it's just part of a much broader crackdown. At the behest of the Justice Dept., a record 25 grand juries are investigating international price-fixing in industries as diverse as vitamins, glass, and marine equipment. The agency is also pushing for new cooperation agreements with other countries, boosting the number of Federal Bureau of Investigation agents investigating suspect companies, and conducting special border watches aimed at catching conspirators.

U.S. DAMAGE. Driving the Justice campaign is a conviction that international price-fixing is on the rise—and hurting the U.S. economy. Although there's no hard data on the subject, complaints about the problem have been increasing, according to the agency. Assistant U.S. Attorney General for Anti-trust Joel Klein believes that as trade barriers fall, companies that once had national markets to themselves may look to cross-border cartels to fend off competitors that are grabbing market share and forcing down prices. "We're looking at cartels that are doing a billion dollars in business," Klein says. "If you assume that they are inflating prices by 15% to 20%, we're looking at hundreds of millions of dollars sucked right out of the economy."

The new wave of price-fixing may not be igniting inflation, but it is increasing costs in discrete markets, Klein contends. In the ADM case, prosecutors say the U.S. price for lysine, a livestock-feed additive, doubled in the first two months of the conspiracy. Frequently, the

Antitrust chief Klein says the global economy pres

re composed of foreign com-
s specifically attempting to
prices in the U.S. The Jus-
Dept. recently won guilty
from several Japanese com-
s for conspiring to raise
s of fax paper here by about
(though a mistrial was de-
l in a case against another
facturer on July 14th).
spite its recent successes,
e can't fight price cartels
. And winning cooperation
other countries gets compli-
in a hurry. Foreign govern-
s have long tolerated price-
cartels, believing that they
ct local companies and main-
mployment levels. When the
asks for permission to inter-
witnesses and review documents,
rities are often reluctant to help.
national cooperation is slowly im-
ng, but federal antitrust cops are
ated. "In most countries, price-fix-
s not a crime," says U.S. Deputy
tant Attorney General for Antitrust
R. Spratling. "It's not seen as very
us, and their procedures for pursu-
are more restrictive."
e price-fixing conspiracies that Jus-
as prosecuted take a wide vari-
f forms, says Spratling.
pirators may set a single
lwide price, or one com-
will be allowed to set the
hat others must follow in
rticular region, as is al-
in the graphite-electrode
Other times, executives
imply divide up the map,
ing whatever they want
eir assigned countries
ut fear of competition.
IT WORKS. Cartel leaders
op sophisticated mecha-
s to police the agreement,
ting internal production
ds from each company.
ecutors charge that in a
-acid price-fixing conspir-
for example, cartel mem-
reviewed the sales of each
irator at the end of each
any company that had
more than its allotted
was required in the fol-
g year to buy the excess
a conspirator that had not
ed its volume-allocation
t in the preceding year.
1996, five companies have
led guilty in citric-acid
ecutions, including ADM, a
subsidiary of German
maceutical giant Bayer,

KEY WITNESS: *Former Archer Daniels Midland exec Whitacre after his arraignment in January*

and Switzerland-based F. Hoffmann-La Roche.

While the primary conspirators are usually high-ranking executives, less-senior corporate intermediaries frequently fine-tune the agreements, Orr says. In the ADM lysine case, for example, prosecutors charge that senior executives attended only those meetings necessary to solve big problems, such as volume-allocation issues, while regional sales managers of competitor companies met to work out details on prices in local markets.

To break up these lucrative arrangements, Justice's most potent weapon has been its "leniency" program, which provides amnesty from criminal charges to the first conspirator in a price-fixing case to 'fess up. Since the program began in 1993, an average of one company a month in a wide variety of industries has come forward. Amnesty cases have led to a record $210 million in fines in the first six months of 1998. "This has uncovered cases that we probably would never have learned about," says Justice's Director for Criminal Enforcement for Antitrust, John T. Orr Jr.

One such case: A U.S. company tipped off Justice to bid-rigging by a joint venture it owned with a Dutch partner. In December, 1997, the Netherlands-based joint venture, HeereMac, paid a $49 million fine after pleading guilty to rigging prices for heavy-lift marine-construction services. Government documents say competitors divided contracts for projects in the North Sea, Gulf of Mexico, and the Far East.

"STUNNING DEVELOPMENT." Slowly but surely, international reluctance to come down hard on price-fixing conspiracies is changing. Antitrust authorities in Europe played key roles in both the lysine and graphite-electrode price-fixing investigations. On May 27, the Japan Fair Trade Commission raided the offices of four graphite-electrode producers. "It's truly a stunning development," says James R. Loftis III, a Washington antitrust attorney with the firm of Collier, Shannon & Rill. "Historically, Japanese competition authorities had been insular about these issues, rebuffing any requests by the U.S. for forced access to Japasnese companies."

Still, huge barriers to cooperation remain. But if Justice can bring some of its current price-fixing investigations to fruition, the agency believes it can make a strong case that cartels are a serious global problem, especially in an era of rising global trade. And that might well force other countries to get on the U.S. bandwagon.

By Susan B. Garland in Washington, with Emily Thornton in Tokyo

TAKING CONSPIRATORS TO COURT

The Justice Dept. is going after global price-fixing schemes, which chief trustbuster Joel Klein believes are at record levels. A few key cases:

FEED ADDITIVES The price-fixing trial of three Archer Daniels Midland officials, including Executive Vice-President Michael Andreas, began on July 9. Prosecutors charge that ADM execs conspired with four Asian companies to limit production and allocate sales of lysine, a livestock-feed additive.

MARINE SERVICES Dutch, Belgian, and U.S. companies paid more than $65 million in criminal fines last December for rigging bids for marine services in the North Sea and Gulf of Mexico. Under one agreement for heavy-lift barges, conspirators agreed to divide customers, pool revenues, and split profits—and they put it all in writing.

GRAPHITE ELECTRODES Two companies have pleaded guilty to fixing prices and allocating market shares worldwide for graphite electrodes, used in steel minimills. UCAR International paid a $110 million fine, the largest in antitrust history. A judge recently rejected a $29 million fine against Showa Denko Carbon, a U.S. unit of a Japanese company, as too low.

FAX PAPER Several Japanese paper companies have pleaded guilty to conspiring to inflate the price of fax paper sold in the U.S.

DATA: JUSTICE DEPT., BUSINESS WEEK

utives with more opportunity—and incentive—to collude

MUSIC

CAN RECORD LABELS GET BACK THEIR RHYTHM?

More lean years lie ahead, but execs already see a turnaround in the distance

Even if Elvis came back or Ginger rejoined the Spice Girls, it would not be enough to fix what ails the music business. Most people finished replacing their vinyl disks with CDs long ago. And just as a shakeout in U.S. music retailing was ending, the troubles in Asia started dragging down another big music-buying market. On July 16, Time Warner Inc.'s Warner Music Group reported its seventh consecutive quarter of year-over-year profit declines. The news isn't expected to be much better when Polygram NV releases its results on July 22. "I wouldn't really bet on a strong recovery in the music industry in the medium term," warns music analyst André Moons at ING Barings in Amsterdam.

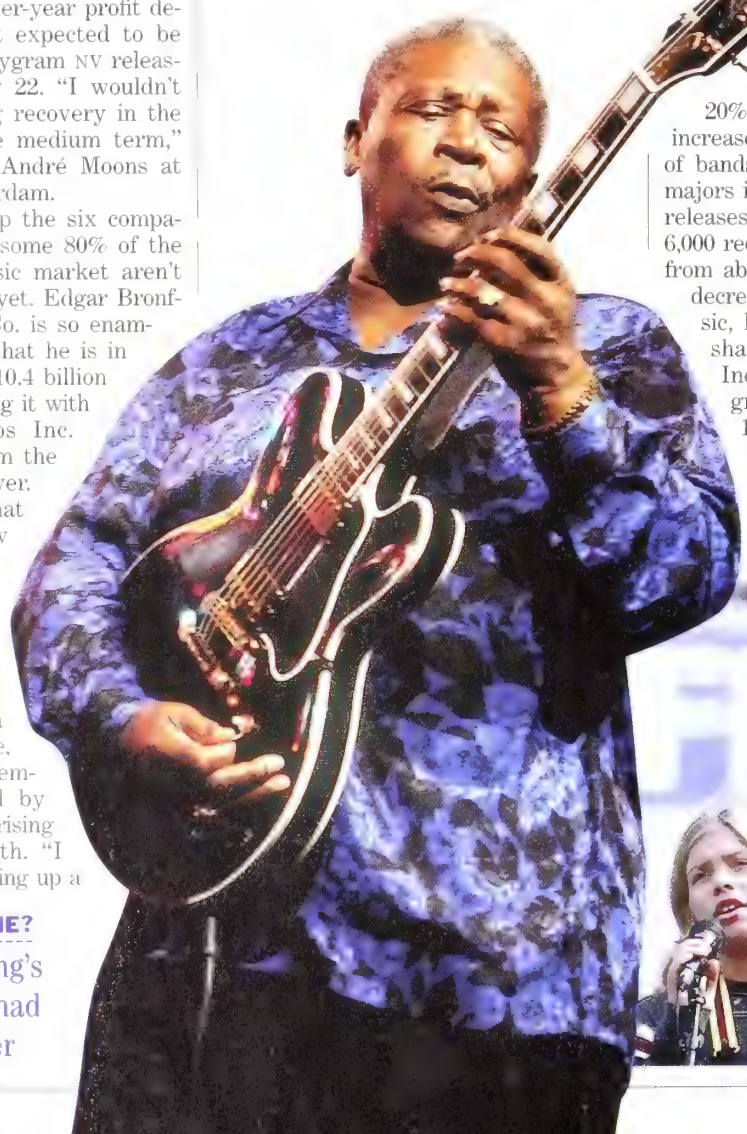
Yet the moguls atop the six companies that account for some 80% of the $30 billion global music market aren't singing the blues just yet. Edgar Bronfman Jr. of Seagram Co. is so enamored of the industry that he is in the midst of paying $10.4 billion for Polygram, combining it with his Universal Studios Inc. music business to form the industry's biggest player.

"SMARTENING UP." What Bronfman and fellow music execs are betting on is that music sales will be poised for takeoff within a few years, propelled by nascent digital technologies and sales via the Internet. Meanwhile, they are readying themselves for a rebound by coming to grips with rising costs and slow growth. "I think we're all smartening up a little bit," says Val Azzoli, co-chairman and co-chief executive of Warner's Atlantic Group. "It's not about market share now, it's about bottom-line profits."

It won't necessarily mean torrid growth. Music sales are expected to grow a compounded 5.6% between 1996 and 2001, after growing at a 10% clip the previous five years, according to Veronis, Suhler & Associates Inc. When demand was at its highest, too many stores were stocked with records that were later turned unsold. But the number of outlets in the U.S. dropped almost 20% between 1995 and 1997, and labels are now more careful about how many copies they ship. "We can get product on the shelves in two days," says Strauss Zelnick, president and CEO of Bertelsmann's BMG Entertainment North America. "There's absolutely no excuse for overshipping in this industry any more."

Zelnick also reduced BMG's staff by 15% and overhead by 20% over three years, while revenues increased 44%. Meanwhile, the number of bands being signed by some of the majors is shrinking, as is the number of releases; their labels released closer to 6,000 recordings combined in 1997, down from about 6,500 in 1996. Much of that decrease is coming from Warner Music, long the leader in U.S. market share. Warner Brothers Records Inc., the biggest label within the group, is paring its releases by 15% to 20% a year, says Chairman and CEO Russ Thyret.

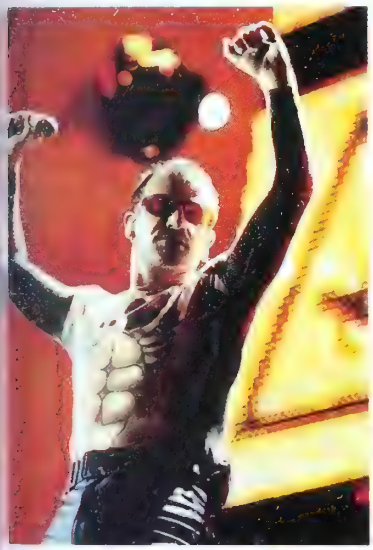
One expense the labels have yet to contain is the amount they lavish on signing and promoting acts. The cost of break-



IS THE THRILL GONE? Polygram, B.B. King's label, most likely had a mediocre quarter

band has doubled in a few years, to ıch as $2 million. "It's become much expensive, more aggressive, and difficult to recruit artists," says ɛt. When Thomas D. Mottola, CEO of Music Entertainment Inc., bid on urrent soundtrack to the TV show *McBeal*, he had to compete with other companies throwing all kinds ɔney." But having reported record ːs with such hits as the *Titanic* ltrack, Mottola is loath to complain. ˈe healthier than ever," he says.

ED EYEBROWS. Not everyone is. er has yet to recover from a manent purge that began in 1994. Home ːh acts as Madonna and matchbox20, med problems at its 50%-owned Co- a House Music Club unit for a 16% ıe in operating profit in the first ɔf the year. However, Time Warner ˈman Gerald M. Levin says the full will be up. "I'm optimistic," he says. n when our growth rate is going in ˈrong direction, we're always gen- ıg cash in the music business."



HIGH HOPES

Internet sales and coming digital technologies could rev up the music biz. That's one reason Bronfman is paying $10.4 billion to nab Polygram, home to Shania Twain, U2, and Hanson. "He has bet the farm on this," says a rival mogul

for stock it is issuing. But at a recent radio industry conference, Bronfman enthused about combining such Polygram acts as Shania Twain, Hanson, U2, and B.B. King with the Universal roster built up by music chief Doug Morris, who also will head Polygram. Baby boomers will continue to buy as much music as they did as teens, he believes, and he's also counting on big sales from developing countries, where as much as half the population is under age 15.

The biggest payoff for Bronfman and other music honchos could come from new forms of digital technology. Zelnick predicts the advance will be a silicon-chip-based device that doesn't spin and is "portable, recordable, and affordable." Meanwhile, Internet sales of music are showing promising early signs. SoundScan Inc. says that while less than 1% of music is sold via the Internet, sales tripled in the past year.

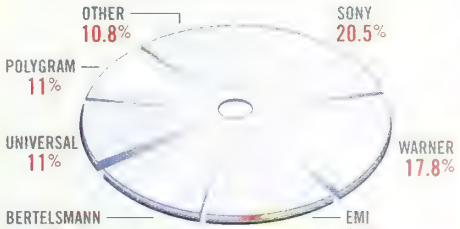
The industry's panacea could be "direct download"—the ability to sell music by putting it directly on a consumer's hard drive, eliminating distribution costs. But that's at least a few years away. And still unresolved is the question of how to protect copyrights on the Internet, not to mention how the big labels would retain their stars if anyone could start an online label and let fans directly download songs.

A simpler yet more elusive solution would be a popular new genre of music. Not since the "alternative" wave of a few years ago has a fresh sound drawn the masses into record stores. "We don't need a technology boost," contends Bryan Turner, CEO of Los Angeles-based rap label Priority Records. "We need some music that really excites people." Without that, all the technology and newfangled business practices in the world will make for an empty refrain.

By Richard Siklos in New York

SIX GIANTS BATTLE FOR SHARE...

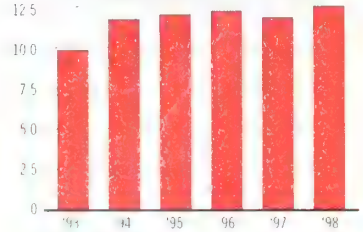
U.S. MARKET SHARE FOR CURRENT ALBUMS
YEAR TO DATE AS OF JUNE 14



DATA: SOUNDSCAN INC

...IN A SLOW GROWTH MARKET

RETAIL VALUE OF
MANUFACTURERS' MUSIC SHIPMENTS



DATA: RECORDING INDUSTRY ASSN., VERONIS SUHLER

A quick fix isn't expected at London-based EMI Group PLC. Music profits in its latest year, ended Mar. 31, dipped 10%, and EMI is expected to tell its July 18 annual meeting that it will do little better this year. Philips Electronics NV, Polygram's owner, already shaved $200 million off its selling price to Seagram because of weakening performance. For Bronfman, whose past forays into entertainment have drawn criticism, that admission raised eyebrows. "He has bet the farm on this," says one rival mogul.

Bronfman is determined to make it pay off. He plans to slash up to $300 million in annual costs within two years by combining Polygram and Universal's operations. The company wouldn't elaborate on its plans, citing the "quiet period"

"Ho

IBM

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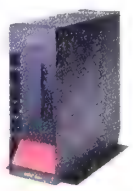

e-business tools

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Cover Story

BIOTECH BODIES

Decades of research into tissue engineering are about to pay off as dozens of startups perfect living organs grown in the lab, not the body

Sean G. McCormack of Norwood, Mass., seems like your average 16-year-old boy, if a little more reckless, given his passion for mountain biking. In fact, though, he is an advance scout for a brave new world: He has the first chest grown in a lab rather than in the womb.

Sean was born without cartilage or bone under the skin on his left side, a rare congenital condition known as Poland's Syndrome. The cartilage down the center of his sternum pointed out, and his heart was virtually unprotected—you could see it beating under the skin. Doctors talked of implanting an artificial plate once he reached 21 and stopped growing. But by the time he was 12, Sean was a star pitcher for his Little League team and no longer wanted to put up with a condition that put him at risk every time he played ball. His doctor referred the family to a team of scientists and surgeons at Children's Hospital in Boston who are leading the way in growing human body parts in the lab.

Dr. Joseph Upton and Dr. Dennis P. Lund, working with tissue-engineering pioneer Dr. Joseph P. Vacanti and his brother, Dr. Charles A. Vacanti, scraped away Sean's protruding cartilage and used the cells to seed a biodegradable scaffold made of artificial polymer, molded to the shape of his torso. Dr. Yilin Cao added growth factors to the cells and "cooked" the concoction in a bioreactor for several weeks until a chest grew. "The procedure was so experimental that none of the polymer companies would give us [custom-designed] material for fear of a lawsuit," says Joseph Vacanti. The doctors had to adapt off-the-shelf polyglycolic acid, normally used to stitch up wounds, adding to the risk of the operation.

Sean admits that "at first I was like, 'What if they mess up?' But after a while, I put it in my head that they've done this a million times." Of course, they had never even done it on an animal. Nevertheless, after receiving special dispensation from the Food & Drug Administration, doctors implanted the engineered cartilage in Sean. Within a year, the

A NEW CHEST

Sean McCormick was born without bone or cartilage protecting his heart—a condition corrected at Boston's Children's Hospital

boy had a normal-looking chest that was able to grow along with him. Now, four years later, the six-foot-tall teenager says: "It's pretty cool. It looks like something I was born with."

This is more than a nice human-interest story. It is a glimpse into the future of medicine, one in which doctors will routinely order up newly grown, living body parts whenever existing ones fail. Or they will prod the body into regenerating itself. After some 20 years of painstaking investigation into the processes by which cells grow, the nascent field of tissue engineering is ready for prime time, and dozens of startup companies are preparing commercial products. Regenerated or lab-grown bone, cartilage, blood vessels, and skin—as well as embryonic fetal nerve tissue—are all being tested in humans. Livers, pancreases, breasts, hearts, ears, and fingers are taking shape in the lab.

Scientists are even trying to develop tissues that would act as drug-delivery vessels. Salivary glands could secrete antifungal proteins to fight infections in the throat, skin could release growth hormones, and organs could be genetically engineered to correct a patient's own genetic deficiencies. "I think [tissue engineering] holds the possibility for revolutionizing clinical medicine," says Kiki B. Hellman, coordinator of the FDA's biotechnology center for devices and radiological health.

The age of the biotech body is dawning. Tissue engineering offers the promise that failing organs and aging cells need no longer be tolerated—they can be rejuvenated or replaced with healthy cells and tissues grown anew. The prospect signals "a profound revolution in medicine," says William A. Haseltine, a leading genetic scientist and chief executive of Human Genome Sciences Inc. in Rockville, Md. "The current chemical era of medicine may, in retrospect, appear to be a clumsy effort to patch rather than permanently repair our broken bodies," says Haseltine. "Cellular replacement may keep us young and healthy forever."

Cover Story

Haseltine's genetic fountain of youth is a long way off. After all, lab-grown organs, the first step towards his vision, are still subject to the ravages of age. But tissue engineering can certainly keep failing organs from shutting down life prematurely. The principle has already been proven with the first off-the-shelf tissue approved by the FDA in May: a living skin, Apligraf, for the treatment of leg ulcers, a common ailment in the elderly. Apligraf maker Organogenesis Inc. of Canton, Mass., turns a few cells of infant foreskin into acres of living skin that can be handled, cut to fit, and grafted on to anyone without fear of rejection or scarring. Next up: cartilage to strengthen the urethra and repair the knee and a method for replacing shinbones. Both processes are in late-stage clinical trials and are likely to be considered for FDA approval in the next year or two.

THUMBS UP. In the next 10 years, a veritable body shop of spare parts will wend its way from labs to patients. "It's time for us to move into humans," says Charles Vacanti, and he's not wasting any time. At the University of Massachusetts at Worcester, his team is growing thumb bones right now in bioreactors for two machinists who cut off their own appendages. Vacanti says one or both of the thumbs should be grafted back on to the patients this summer, with growth factors added that will encourage regeneration of the nerves and tendon. He figures that the thumbs will be operational about 12 weeks after surgery.

In Boston, meanwhile, a team of doctors at Children's Hospital led by Dr. Anthony J. Atala plans to implant a bladder grown from fetal cells into a human in the next few months. Atala's lab caused a stir in the medical community last summer when doctors there successfully used the same

THE NEW ERA OF REGENERATIVE MEDICINE

Dozens of biotech companies and university labs are developing ways to replace or regenerate failed body parts. Here are a few of the projects:

BONE

Bone-gro
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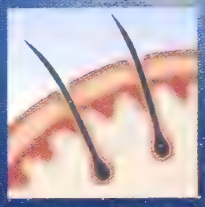
creating new jaws or limb
product that creates shin-
bones is in clinical trials.

COMPANIES: Creative Biomolecules, Orquest, Sulzer Orthopedics Biologics, Genetics Institute, Osiris Therapeutics, Regeneron.



SKIN

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foot ulcers and burns.

COMPANIES: Organogene
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LifeSciences, LifeCell, Or
International.

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been tested in animals an
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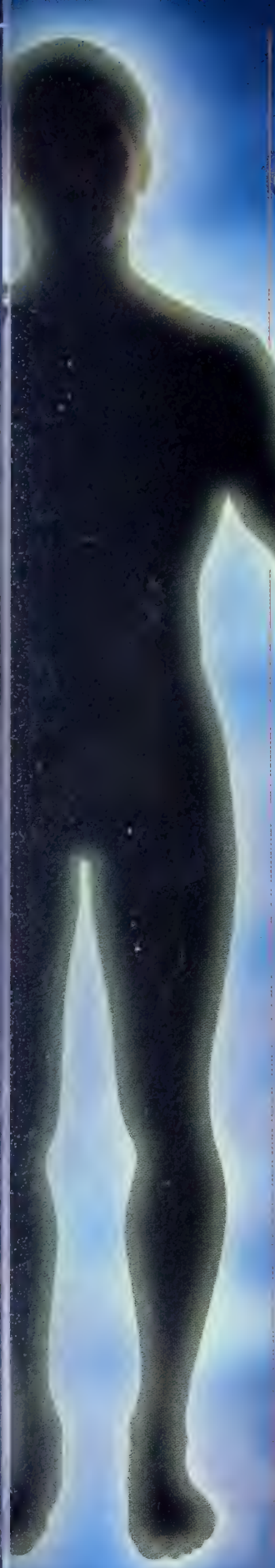
COMPANIES: BioHybrid
gies, Neocrin, Circe Biom

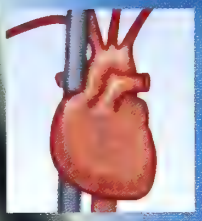
DATA: BUSINESS WEEK, DRUG & MARKET DEVELOPMENT REPORTS



SALIVA GLANDS

Proteins called aquaporins that allow cells to secrete water are used to recreate saliva glands damaged by disease or radiation. Glands are also being engineered to secrete healing drugs. The technique has proven successful in mice.

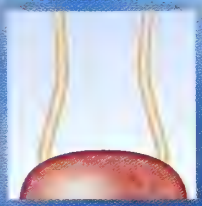
COMPANIES: None yet.



HEART VALVES, ARTERIES, AND VEINS

A 10-year initiative to build a heart has just started. Genetically engineered proteins have been successfully used to regrow blood vessels.

COMPANIES: Organogenesis, Advanced Tissue Sciences, Genentech, LifeCell, Reprogenesis.



URINARY TRACT

Cartilage cells are taken from the patient, packed into a tiny matrix, and injected into the weakened ureter, where they bulk up the tissue walls to prevent urinary backup and incontinence. The method is in late-phase clinical trials.

COMPANIES: Reprogenesis, Integra LifeSciences.

CARTILAGE

A product is already on the market that regrows knee cartilage. A chest has been grown for a boy and a human ear on a mouse.

COMPANIES: Genzyme Tissue, Biomatrix, Integra LifeSciences, Advanced Tissue Sciences, ReGen Biologics, Osiris Therapeutics

TEETH

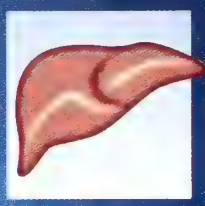
Enamel matrix proteins are used to fill cavities. It works in dogs; human trials are a few years away.

COMPANIES: Biora, Atrix Laboratories, Creative BioMolecules.

BREAST

In preclinical studies, several companies have been able to create a cosmetic nipple by inserting a ball of cartilage. Researchers are now trying to grow a whole cosmetic breast.

COMPANIES: Reprogenesis, Integra LifeSciences.



LIVER

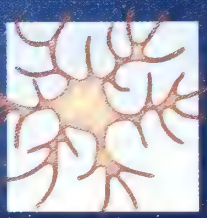
A spongy membrane is built up and then seeded with liver cells. Organs the size of a dime have been grown, but a full-size liver could take 10 years due to its complexity.

COMPANIES: Advanced Tissue Sciences, Human Organ Sciences, Organogenesis.

BLADDER

Doctors at Children's Hospital in Boston have grown bladders from skin cells and implanted them in sheep. They are about to try the same process on a patient.

COMPANIES: Reprogenesis.



SPINAL CORD NERVES

Scientists are investigating nerve-growth factors, injecting them at the site of damage to encourage regeneration or seeding them along biodegradable filaments and implanting them. Rats have been made to walk again.

COMPANIES: Acorda, Regeneron, CytoTherapeutics, Guilford Pharmaceuticals.

procedure to implant new bladders into 10 baby lambs.

Creating even the most complex organs seems possible, though still 5 to 10 years out. Researchers from around the world met in Toronto in June to set up a 10-year initiative to grow a human heart. "It's an ambitious project but not a farfetched one," says Michael V. Sefton, biomaterials professor at the University of Toronto and head of the heart effort. "The likelihood of success is very feasible."

Other complex tissues are already taking form. At Massachusetts Institute of Technology, chemical engineer Linda Griffith-Cima is using three-dimensional printers, first developed for computer-aided design, to build up structures that are turned into mouse-size livers. And at the University of Michigan in Ann Arbor, David J. Mooney, another

Cover Story

chemical engineer, is heading an effort to grow cosmetic breasts for women who have had theirs removed. Researchers in Sweden and California have been able to regenerate nerves in rats with severed or damaged spinal cords to the point where they can walk again—albeit weakly.

With each success, more attention is paid. After years of barely acknowledging tissue-engineering research, the National Institutes of Health plans to award 30 grants in the field, some $6 million worth, this summer. But the lack of government interest heretofore may have been a blessing in disguise. Gail Naughton, president of Advanced Tissue Sciences Inc. of La Jolla, Calif., says that because so little federal money was available, tissue engineers had little choice in years past but to start a company and go public in order to raise funds. "I think that this field has moved so quickly toward reality precisely because it spent very little time in academic labs," she says.

Even as it gains recognition, tissue engineering remains hard to categorize. The multidisciplinary field attracts surgeons, chemical engineers, materials scientists, and genetic researchers. Products straddle the boundaries between medical devices and gene therapy. The FDA even had to set up a special task force three years ago to figure out how to regulate the products.

The FDA is playing catch-up with a technology that has been 20 years in the making. As early as 1979, Eugene Bell, professor emeritus of biology at MIT and the founder of Organogenesis, figured out how to grow skin in his lab. Since then, much of the field's progress stems from a 20-year collaboration of two fast friends—Joseph Vacanti, a pediatric surgeon at Children's Hospital, and Robert S. Langer, a chemical engineering professor at MIT. Their lab "seeded the entire country with people doing this work," says Dr. Pamela Associ sett, president of medical consultants BioTrend in New York.

LIFE MISSION. The two, both 49, first met as researchers in the mid-1970s and started working on a way to grow tissue in the early 1980s. In 1986, they developed an elegantly simple concept that underlies most engineered tissue. Start with a scaffold, bent to any shape, made of an artificial, biodegradable polymer. Seed it with living cells, and bathe it in growth factors. The cells multiply, filling up the scaffold and growing into a three-dimensional tissue. Once implanted in the body, the cells are smart enough to recreate their proper tissue functions. Blood vessels attach themselves to the new tissue, the scaffold melts away, and the lab-grown tissue is eventually indistinguishable from its surroundings.

Vacanti, who is remarkably self-effacing despite his pioneering role in the field, says he is driven by his dedication to his patients. He regularly saves the lives of the small

REGAINING FEELING

Jimmy DeJesus is a semiparalyzed lab technician at Integra LifeSciences, which is working to get nerves to regenerate

en by replacing their failing livers—and regularly sees s die for lack of donors. "I recognized fairly early that ggest problem facing me as a surgeon was the shortage gans," he says. "I've devoted my professional life to g that problem. Wouldn't it be nice if [tissue engineer- ould provide the solution?"

e is an understatement. A study done by Vacanti and er in 1993 found that more than $400 billion is spent ear in the U.S. on patients suffering from organ failure sue loss, accounting for almost half the national health- ill. Some 8 million surgical procedures are performed lly to treat these disorders, yet every year 4,000 people hile waiting for an organ transplant. An additional 0 die without even qualifying for the waiting list.

THE BRINK." Those kinds of numbers represent a huge ercial opportunity as well as a humanitarian one. Dr. C. Johnson, president of the Pittsburgh Tissue Engi- g Initiative research consortium, estimates that the ll market for engineered and regenerated tissues could $80 billion. As for individual products, Michael Ehren- biotech analyst with investment adviser Techvest of York, says that the most imme- y promising are those that re- lamaged knee cartilage, now re- l with artificial materials. "There quarter of a million meniscus -joint] operations performed year, and no good options for ," says Ehrenreich. "That's the app."

sue engineering is dominated y tiny startups (table, page 64), he big drug companies are be- g to take notice. Novartis Phar- ticals Corp. has investments in issue-engineering companies, in- g Organogenesis. "With the approval of Apligraf, this whole has really sparked the imagina- of corporate executives," says l Epstein, vice-president of No- s' specialty-business sector. e stepped over the brink into ture of medicine." Novartis is he only one with future vision. in's Smith & Nephew is invest- ome $70 million in Advanced e Sciences; Amgen has a deal up to $465 million with Balti- -based Guilford Pharmaceuticals velop a compound for regener- nerves; Stryker is funding re- h into bone regeneration at Cre- BioMolecules of Hopkinton, .; and Medtronic has agreed to t up to $26 million in lab-grown valves from LifeCell in The llands, Tex.

though it may take a decade or for some of these investments e any returns, scientists in the are heartened by the rapid ess of the past two to three years. "The kinds of things we are doing now are the kinds of things that we used ink about sitting around having beers 13 or 14 years says Dr. Scott P. Bruder, director of bone and soft-tis- egeneration research at Baltimore-based Osiris Thera- cs Inc.

rhaps most intriguing about tissue engineering, though, is how much the scientists don't know. Much of the excitement in biotech these days centers on figuring out complex cellular interactions and then intervening. Tissue engineering, however, is driven by surgeons and engineers who are, by nature, most interested in a successful endpoint—and less so in how they got there. "The great thing is, we don't need to know exactly why or how cells organize into tissues," says Joseph Vacanti. "We just need to know that they do."

Tissue engineering offers the promise that failing organs and aging cells need no longer be tolerated

THE SKIN OF OUR SHINS

Bill Smith of Glenside, Pa., airs his healed leg ulcer at the beach after regenerative surgery with Apligraf skin

This all sounds easier than it actually is. Scientists must still figure out the best materials for the scaffolds that shape the organs, determine exactly the right growth factors, and pick the right cells. For bone and cartilage replacement, one possibility under investigation is a kind of premature cell called a stem cell. First isolated from human bodies in 1992, this specialized cell can turn into everything from bone to tendon to cartilage. Implanting these cells in the appropriate location can generate the full range of cells normally found at that site. While only about one in 100,000 to one in several million bone-marrow cells are stem cells, Osiris Therapeutics, partly owned by Novartis, has been able to isolate enough of them to regenerate bone in both small and large animals.

UNWELCOME STRANGERS. Scientists also must figure out ways around the immune system's rejection of human tissue. That's not a problem for skin—it presents relatively few resistance problems since the immune system will accept some foreign dermal cells. Nor is rejection a problem when the original cells are taken from the specific patient for which they are meant. However, if off-the-shelf organs are to be transplanted, patients must take the same immunosuppressant

drugs now given to them when donor organs are used.

Ideally, tissue engineers want to develop universal donor cells that would not trigger an immune response, so that body parts can be manufactured in large numbers. To that end, cells must either be genetically stripped of their rejection-provoking proteins or encapsulated in a porous membrane that the body will accept. The latter approach is nearing clinical trials for the treatment of diabetics whose pancreases are failing. BioHybrid Technologies Inc. in Shrewsbury, Mass., and Neocrin Co. of Irvine, Calif., are harvesting insulin-producing cells, called islets, from the pancreases of pigs and encasing them in a membrane that blocks the immune response while allowing the cells to do their job. The capsules are injected into the abdomen, where they go to work producing insulin.

Cover Story

Some companies are trying to avoid the whole immunity problem by encouraging the patient's own tissue to regenerate. Genentech Inc., for example, announced in March that 5 of 15 patients who were given a genetically engineered protein called VEGF regrew blood vessels around the heart. Integra LifeSciences Corp. of Plainsboro, N.J., believes that just about any tissue can be regenerated by implanting a collagen matrix coated with the appropriate growth factors at the site of the damage. It already has such a matrix on the market for growing back a burn victim's skin and is in clinical trials with a similar product for the nerve endings in arms and legs. "The body is continuously regenerating tissue," says Integra Chief Operating Officer George W. McKinney III. "We're just trying to harness that process."

Most scientists agree that regeneration is the ideal but doubt that it is always possible, or practical. "Sometimes you have complete organ failure and can't wait for tissue to grow back," says Antonios G. Mikos, a bioengineering professor at Rice University. "In truth, I think we will have both approaches. There is no one right way."

Indeed, there are dozens of right ways in the works. Reprogenesis Inc. of Cambridge, Mass., for example, is in late-stage clinical trials with its method for using lab-grown cartilage to reinforce the urethra, a tube leading to the bladder. Weakened urethras can lead to incontinence, which afflicts an estimated 10 million people in the U.S., and reflux, a potentially fatal condition affecting about 1% of all infants in which urine backs up into the bladder. Reprogenesis removes cartilage cells from behind a patient's ear, grows them in lab, and then mixes them into a gel matrix. The cell reinserted endoscopically where the urethra meets the der. There, they grow to bulk up the tubal walls.

"I recognized fairly early that the biggest problem facing me as a surgeon wa the shortage of organs"

A knee-repair product called Carticel, approve the FDA last August, uses somewhat the same prin Made by Genzyme Tissu pair, Carticel grows car cells removed from th tient in the lab and ther gically reimplants them i knee. No matrix is prov however, so the cells can be used to repair small To replace the entire m cus—that's the C-shape in the knee between thigh bone and shin bo ReGen Biologics Inc. of wood City, Calif., is in cl trials with a collagen sc in the shape of the men The pad is implanted i knee to encourage rege tion of the patient's cart Going a step further, vanced Tissue Sciences preclinical trials with a m cus-shaped cartilage gro the lab that's meant to in anyone. It hopes to human tests by yearen

WONDER WORKERS

Robert Langer and Dr. Joseph Vacanti, a chemical engineer and a surgeon, respectively, have been the driving force behind many milestones over the past 10 years in producing new body parts

NO MORE FILLINGS? After tilage, look for bone proc Creative BioMolecules I Hopkinton, Mass., base approach on a bone-reg ating protein called OP-1 company molds a porous fold out of calcium, seeds it with OP-1 and a few of th tient's own bone cells, and then reinserts the newly g structure. Doctors reported in March that in a clinical t 122 patients with tibia fractures, the OP-1 graft perform well as grafts using the patient's own bone.

The biggest market for tissue, though perhaps no most dramatic, is the mouth. Some 10 million dental surg are performed each year in the U.S., on everything teeth to periodontal ligaments, and most use artifici placements. One of the first tissue-engineered alternativ Atrisorb, made by Atrix Laboratories Inc. of Fort Co Colo. On the market since 1996, it is a bioabsorbable m ial loaded with growth factors and healing drugs that g the regeneration of gum tissue.

But think of the implications if cavities could be with engineered tissue. Harold C. Slavkin, director of the tional Institute of Dental Research at the NIH, says al genes for making enamel have been cloned and seque

b-grown human enamel could eality in 5 to 10 years. Some llion new fillings are placed year, and some 200 million eplaced. If those could be with original tissue, says n, "we'd never have to do onal fillings again."

URRY. Of course, many of lab-produced body parts ever make it out of clinical And doctors admit that are entering uncharted wa- Who knows what might hap- to an engineered organ es after it has been implanted? Lab-grown tissues ut through far more rigorous purification processes lonor organs to make sure that they don't carry dis- eases, but it still is impossible to be completely sure that a replacement organ won't cause as many problems as the original a few years, or decades, down the line. Still, there has been no evidence that these engineered tissues could turn malignant, says Joseph Vacanti. Therefore, he asks, "can we really afford to wait for a complete understanding of how the process works?" To him, the answer must be no. Millions of lives are hanging in the balance.

By Catherine Arnst in New York, with John Carey in Washington

BusinessWeek ONLINE For related information on Biotech Bodies, see the following online-only stories at www.businessweek.com:

INVESTING IN TISSUE ENGINEERING An analysis of how stock market pros see the prospects for companies on the cutting edge in tissue engineering

SEAN'S STRUGGLE How Sean McCormack waged the battle to overcome the birth defect that left him with a misshapen chest

THE CELL DOCTORS A profile of Joseph P. Vacanti and Robert Langer, close friends and tissue-engineering pioneers

REGROWING NERVES A look at the promising research into repairing damaged nervous systems with biotechnology

Tissue-Engineering Startups

zens of small companies have gone to the public narkets in recent years to raise funds for research tissue repair, replacement, and regeneration. se companies now have a total market capitalization me $2.5 billion, according to the Rhode Island er for Cellular Medicine. Most of them, however, turn a profit only if their experimental treatments e it through several clinical trials and gain apal from the Food & Drug Administration, which can risky bet.

Witness what happened to Advanced Tissue Sciences Inc. after the FDA delayed a final decision on its lab-grown skin for diabetic foot ulcers on June 11. The stock, which had already declined from 14 to 7 this year, crashed to a low of 3½ on the news. Still, the creators of those tissues that do succeed will have a good shot at tapping into the $80 billion potential market for engineered tissues.

Though not a comprehensive list, this table includes some of the companies with big plans.

NY	52-WEEK HIGH	52-WEEK LOW	RECENT STOCK PRICE*	COMMENTS
ANCED TISSUE NCES (ATIS)	18½	3½	4	New trials on Dermagraft, its living-skin product, will have to be done before the FDA will allow commercial distribution. Also working on other uses for its technology, in orthopedics and cardiology.
X LABORA- IES (ATRIX)	23⅞	11	14½	Working on systems to grow gum tissue, heal bone fractures, and treat soft tissues.
MATRIX X)	43½	20⅝	41⅞	The success of Synvisc, its treatment for osteoarthritis of the knee, is key to investors now.
ATIVE BIO- ECULES (CBMI)	11⅝	4⅛	4 9/16	In trials for a bone-mending product. Also developing technology to form cartilage, kidney, tooth, and brain tissues.
OTHERAPEUTICS I)	7⅝	1 1/16	1 1/16	Developing therapies for disorders of the central nervous system, such as Huntington's and Lou Gehrig's diseases.
FORD PHARMA- TICALS (GLFD)	32¾	16½	17¼	Developing products that will regenerate nerves in Parkinson's disease and injured spinal cord victims
ZYME TISSUE	12½	5	6⅝	This separately traded Genzyme division has products for skin repair and replacement and is developing bioengineered cartilage.
GRA SCIENCES (IART)	10¾	5⅞	7⅜	Products induce cells to regenerate body tissues and organs. Gained approval in March 1996 for Integra, a skin-regeneration product.
CELL (LIFC)	8⅜	3½	5⅛	Working on lab-grown heart valves and dental tissues. Currently markets AlloDerm, a skin graft used in reconstructive surgery.
ANOGENESIS B)	37 51/64	10 41/64	16¼	Makes Apligraf, the first engineered skin to win FDA approval for treating leg ulcers. Also working on arteries and an artificial liver.
EC INTER- IONAL (ORTC)	23	8⅜	15½	This engineered-skin developer is working on a skin product for burns and other wounds.
ENERON PHARMA- TICALS (REGN)	13	7	9	Developing protein-based treatments for degenerative neurological diseases, muscle atrophy, and abnormal bone formation.

f July 13

DATA: BUSINESS WEEK, BLOOMBERG FINANCIAL MARKETS, TECHVEST LLC, D&MD

BANKS

A CREDIT-CARD REVOLT AT THE BANKS?

Citibank and other major issuers are wondering just how much they need Visa and MasterCard

Open your wallet. Take out your credit cards. Most likely, you have several Visas and MasterCards. Look at the blue-and-yellow Visa logo and the orange-and-red MasterCard logo. You may not have noticed it, but the logos are about 15% smaller than they used to be—and the name of the financial institution or a co-brand like United Airlines is probably in larger type.

These changes may seem insignificant. But they symbolize a potentially far-ranging realignment in the $2 trillion-dollar credit-card business. That shift could seriously undermine Visa and MasterCard's hegemony.

For three decades, the two associations have led the development of the credit-card market, linking more than 20,000 financial institutions that own Visa and MasterCard. They built two umbrella brands, which have gained near-universal retail acceptance and consumer recognition. The associations also operate the back-office switching networks that allow banks to communicate with each other. In return, they receive dues from the banks, plus a slice of the transaction fees charged to retailers. That added up to an operating profit of $673 million in 1997 for Visa International in the U.S. alone, and $55 million for nonprofit MasterCard International, which they plow into promotions and network enhancements.

MEGABANK MUSCLE. For the majority of the banks, these services are well worth the price. But now, as rapid bank consolidation shifts ownership of the card business toward a few Goliath banks, the calculus is changing. The top five card-issuing banks—Citibank, MBNA, Bank One/First USA, Chase Manhattan, and Household International—have 52% of the business. With their own national brands, marketing budgets, and sophisticated processing systems, these megabanks don't need or want much marketing assistance from the associations. In fact, banks complain they are actually subsidizing the associations by running huge volume through their processing networks. "Large issuers are increasingly asking how much do we really want Visa to do," says James G. Jones, head of consumer credit at BankAmerica Corp. and a bank representative on the Visa board. Adds Philip G. Heasley, vice-chairman of U.S. Bancorp, "Some bankers believe it would be in their best interest if Visa and MasterCard started evaporating. Others are running for cover under their brands. We're in-between."

CHARGED UP: *Visa's Pascarella sees room to grow in debit and smart cards*

The associations are well aware of the issue. "Whether they like it or not, the Citibank name isn't recognized at the chants," insists Steven VanFleet, head of U.S. consumer programs at MasterCard. "A number of times, banks have wanted to do things on their own have come back to us." Carl F. Pascarella, chief executive officer of Visa U.S.A. Inc., says, "It's an era when banks can do more for themselves. We will make sure we are not only relevant but absolutely necessary."

To preserve their relevance, Visa and MasterCard are pushing into new payment systems such as debit cards and smart cards. But they are facing

etitors, new technology, and even ustice Dept., which is probing pos- antitrust problems. "Their role is x. Their existing role will definitely e in importance," claims Dudley M. s, executive vice-president of Wells) Bank.

ll, few companies can rival Visa in eting savvy. Its long-running "It's ywhere You Want To Be" tagline ›ig-ticket sponsorship of events as the Olympics have made it the recognized brand name in the fi- al industry. That recognition, and going battle for market share with erCard, have caused credit-card › soar. But it also has lowered the ers to entry. In the early 1990s, anks such as AT&T, Advanta, and USA were able to enter the market quickly take on the larger banks suing Visa- and MasterCard- brand- rds with no annual fees and lower est rates.

D WARS. That has been great for onsumer, but it has helped wreck conomics of the industry. Accord- › Lee A. Spirer, a consultant with , Allen & Hamilton Inc., since the average return on assets for t-card issuers has slipped from to 1.5%.

e tougher competition and slower stry growth have prompted big s to stand out by promoting their brands—hence the shrinking logos. inevitable that the branding strate- of the associations and the banks start to run into each other," says Fargo's Niggs.

MELTING PLASTIC?

Visa and MasterCard face a slew of challenges

- ▶ Megabanks want to promote their own brands over Visa or MasterCard
- ▶ New competitive network systems are emerging
- ▶ Visa and MasterCard are struggling in E-commerce projects
- ▶ Credit-card volume growth and returns to issuers are sliding
- ▶ Justice Dept. antitrust investigations are persisting

DATA: BUSINESS WEEK

Consulting. But Citi would have had to force Visa and MasterCard to change their bylaws that prohibit member banks from issuing American Express cards—or failing that, resign from the associations.

Citibank may already be pressing Visa and MasterCard more aggressively on fees. David Robertson, president of *The Nilson Report*, a credit-card newsletter, says Citicorp CEO John S. Reed recently called a meeting of Visa board members to discuss how much to spend on advertising the Visa brand, vs. lowering fees to members. Citibank executives declined comment on the event.

Schutzer, an expert on Internet technology, big banks also may question how much they are paying for the backbone network provided by Visa and MasterCard. Companies such as Hackensack (N.J.)-based First Data Corp., which do substantial bill-processing for banks, already can authorize and clear a good percentage of transactions between banks without the Visa or MasterCard networks. "As the Internet develops," says Schutzer, "there will be both private and public network alternatives."

To bolster their position, Visa and MasterCard are expanding their systems around the globe, opening new avenues, such as allowing consumers to charge their utility bills, and broadening their role beyond consumer credit cards to corporate cards, debit cards, and new products like stored-value cards. In the past three years, debit cards have brought banks an extra $700 million in annual revenue. For continued growth, both point out that 80% of all purchases are still made by cash and check. "Ultimately, people will come to see Visa as the world's best way to pay, as opposed to the world's best credit card," brags Michael Beindorff, head of marketing at Visa USA.

But Visa and MasterCard have not been as successful in blazing a path for their members in the virtual world. True, most transactions on the Internet are made with traditional credit cards. But so far almost all new initiatives by the associations—such as Visa Interactive, a home-banking platform, and SET, a protocol jointly developed by all the major credit-card companies to secure Internet transactions—have fallen flat. Smart-card pilot programs that Visa and MasterCard have run over the last two years, such as one recent test in New York City's Upper West Side, have gen-

"We will make sure we are not only relevant but solutely necessary" — CARL PASCARELLA, CEO, Visa USA

"Their existing role will definitely decline in importance" — DUDLEY NIGGS, VP, Wells Fargo Bank

ıe leader in the slowly building re- against Visa and MasterCard is ly Citibank, which accounts for 16% credit cards and is the industry's ·st Visa and Mas- ard issuer. Several s back, it experi- ed with its own t card. And it has vied for equal at- on for its brand. Former ads car- the tagline: "Not just Visa, it is ank Visa." Unlike many big banks, it even refused to issue Visa- or erCard-branded debit cards.

ast year, several sources claim, ank considered acquiring American ress Co., which not only issues cards ıandles all processing for merchants. s would give Citi a proprietary net- and brand it could build into a like dominance," says Michael Smith, nsultant with Mercer Management

The nation's largest banks are trying to pressure Visa and MasterCard to drop their "all for one, one for all" philosophy and behave more in the biggest players' interests. The size of both boards has been significantly shrunk to focus more on the big banks. Representatives of large banks on both boards are arguing against funneling money into developing new credit products such as Visa's Signature Card and World MasterCard. "The tension is definitely escalating," says John H. Bennett, a banking consultant and former head of marketing for Visa International. "Visa has grown beyond the banks' wildest dreams and fears."

In the future, says Citicorp's Daniel

erated little consumer interest. And in a slap at the two cards' brands, major banks have formed separate consortiums to set their own standards for E-commerce, such as Integrion Financial Network, a venture with IBM for Internet banking.

Visa and MasterCard still retain a commanding position and could overcome these obstacles. But the evidence suggests the two card giants may be reaching their credit limit.

By Kathleen Morris in Los Angeles

BANKING

SWISS BANKS: THE NOOSE TIGHTENS

Sanctions could up the ante on Holocaust payments

In an issue as explosive as Switzerland's ill-gotten gains from Holocaust victims during World War II, there are bound to be more than two sides. These days, it seems there are at least four. In the U.S., a vocal group of state and city finance officials has announced escalating sanctions against Swiss commercial banks, beginning on Sept. 1. Washington says sanctions are a terrible idea. Meanwhile, across the Atlantic, Switzerland's commercial banks have proposed a settlement. But Swiss President Flavio Cotti and the central bank don't want to open federal coffers.

Now the debate threatens to spread. On July 22, Senator Alfonse M. D'Amato (R-N.Y.) will hold a hearing on whether the U.S. should reopen the 1946 Washington Accords, which determined the amount that the Swiss government agreed to turn over to the Allies to compensate for stolen assets. Coming on top of the sanctions threat, that suggestion has the Swiss howling.

But the big commercial banks that were the main targets of recent investigations into looted Holocaust assets may wind up bearing the financial brunt of the furor. Credit Suisse Group and the newly merged United Bank of Switzerland have together offered $600 million to settle dormant accounts. The World Jewish Congress is demanding $1.5 billion, insisting that the Swiss government and central bank contribute a portion. With penalties against them imminent, however, the commercial banks could come up with a compromise figure. That would save political face for their government, which has signaled in the past that in a less combative environment, it would be more likely to contribute additional restitution funds.

NO DICE: *Swiss President Cotti isn't helping by refusing to give any more federal money*

The banks aren't happy about acting as diplomatic fixers. "We didn't believe we would be expected to deliver the Swiss government," says a bitter Richard Capone, chief executive of UBS USA. He and Robert O'Brien, managing director of New York-based Credit Suisse First Boston, say the commercial banks are not now contemplating a higher offer. But "we take the sanctions very, very seriously," says O'Brien.

Although neither will quantify the hit to their American business, the two banks face an alarming spiral of sanctions if they don't appease their opponents. In September, participating state and local U.S. governments would halt overnight deposits in Swiss banks. In mid-November, state and city pension funds would keep new money-mar ment contracts from the Swiss and hibit money managers from tra through Swiss banks. By January, would cancel existing fund-manage contracts and ask legislators to ex Swiss companies from state and purchasing bids. And by mid-1999, lic pension funds would dump all Swiss stock.

BIG PENALTIES. The U.S. group, le New York City Comptroller Ala Hevesi, has not added up such sanctions would affec commercial banks' bo lines. Hevesi has put tog a network with 800 local ernments across the U.S. there's no telling how r would follow their recom dations. New York City' tirement systems hold $ million worth of shares i two Swiss banks, and the paid $31 million in invest fees to Swiss banks last Hevesi's office says that 800 local finance author joined the sanctions, C Suisse and UBS would much more in fee income the $900 million differenc tween their offer and the billion the World Jewish gress is asking for.

That's why James E banking analyst at M Lynch & Co. in London lieves that the banks may c ulate and lay out $1 billion b the hardest-hitting sanctions in. "What will sting is the mid-No ber deadline," says Hyde, when p pension funds, and not just city fir authorities, begin withholding their ness. Hyde says Credit Suisse an have sufficient provisions to cover billion outlay, which would amou $1.60 a share for Credit Suisse and a share for UBS. Although the one payout of reserves could affect banks' valuations, he's not changin long-term buy recommendation o ther stock.

Hevesi's group feels it has no c but to keep the pressure on the b "The diplomatic efforts that have forward haven't produced results s says New York State Comptrolle Carl McCall. Unless Washington Bern come to a high-level understa in the next six weeks, the comm banks may be forced to do the job their government could not.

By Joan Warner in New York, John Parry in Geneva

> Credit Suisse and UBS are stuck playing diplomat—they must appease New York critics while helping the Swiss government save face

By Larry Light

USINESS EXPENSES: THE IRS USES A CROOKED YARDSTICK

more congenial Internal Revenue Service? Forget about that. Sure, Congress recently ssed a measure to tame the 's aggressive ways toward indilual taxpayers. But Corporate nerica is in the agency's sights re than ever.

Increasingly, the IRS is zapping deductions companies take for merous everyday expenses. The ency treats them as capital costs, ich usually must be amortized her than expensed. In the IRS's w, Ford Motor Co. must amortize cost of training workers to asnble a new model of automobile. so on the write-off no-no list are costs of making bank loans, pay- mergers-and-acquisitions advis-, signing up cell-phone subibers, overhauling jet engines, and signing new packaging. Expect re disallowances to come.

SSING LIFELINE. The result is a kdoor tax increase on Ameri- business. The burden falls st heavily on small companies t can't afford high-powered attorneys and accountants. mediate deductions are a life- for many fledgling enterprises t need as much cash as possible. g bucks are at stake. Although no e has yet quantified exactly how ch, the IRS clearly is hoping to ture more of the billions that corrations deduct yearly. Says hman Brothers Inc. tax expert bert Willens: "The impact of all s is monumental."

The revenuers' policy has led to dless litigation and made accountg for expenses a headache, given e tax code's byzantine complexity. complicate matters further, some sts must be amortized (the deducns stretched out over the life of e asset, like a bank loan), while ners can't be deducted at all if ere's no obvious life span. Although amortizing at least lets a mpany deduct, the value is greatly uted, since a tax write-off taken at once is more valuable than one taken piecemeal.

Historically, companies have had to amortize deductions for tangible capital improvements, such as the cost of a new factory. Fair enough. But as America became less of a smokestack economy, the tax collectors took aim at intangible assets.

The IRS drew first blood against M&A expenses, winning a landmark 1992 U.S. Supreme Court case involving a specialty chemicals maker called Indopco Inc., which had deducted the $2.2 million fee it paid to Morgan Stanley & Co. during buyout talks with Unilever PLC. Terming the Morgan tab a capital expense, the court ruled that the acquisition, as the fruit of the firm's labor, somehow enhanced Indopco's value. That would make more sense if Indopco had paid Morgan to build a chemical plant instead of to shuffle paper.

Recently, the IRS pushed the envelope further with U.S. Tax Court wins in June against FMR Corp., parent of Fidelity mutual funds, and PNC Bank Corp. Barring an unlikely overturn on appeal, investment companies won't be allowed to deduct a dime for starting new mutual funds. These costs, about $10,000 a crack for most fund companies, can't be amortized since funds have no set longevity, says the IRS. More significantly, banks must amortize the costs of originating each of the millions of loans made yearly, averaging $150 per consumer borrowing. Using a 7% interest rate to calculate the discounted value of future amortized deductions, BUSINESS WEEK estimates that this could have boosted PNC's $380 million tax bill in 1997 by up to $17 million (the bank won't furnish calculations on the extra liability), and upped the banking industry's $37 billion annual tax payment by some $2 billion.

It has become a Talmudic exercise to differentiate between an everyday expense and a capital cost. The cost of signing up a new customer for a checking account can be expensed, while signing up that same person for a loan must be amortized. Advertising—say, to introduce a new cell-phone service—is a deductible cost. But other launch outlays, such as sales commissions for enlisting cellular subscribers, must be amortized. Fixing computers to handle the Year 2000 problem is deductible, since that's simply repairing an existing asset. Retooling old jet engines, however, must be amortized as a capital cost, because, says the IRS, the engines emerge as good as new.

A situation worthy of Lewis Carroll. What to do? Go back to the simpler system in use before the Indopco decision, when everyday expenses were treated as what they are.

ig bucks are at stake. "The impact of all this monumental," says a Lehman tax expert

Associate Editor Light covers corporate strategies.

MUTUAL FUNDS

SAFE— AND SORRY

The Brandywine Fund put billions in cash, and investors fled

With his winsome blend of enthusiasm and cornball humor, Foster S. Friess can work a crowd. But the 58-year-old Friess, who runs the Brandywine Fund, had his work cut out for him at the annual Morningstar Mutual Fund Conference in Chicago last month. Once a five-star fund manager, Friess had missed most of this year's stock market gain—not because of selecting bad stocks but because of selecting no stocks.

"I want to know why the hell he went to cash," fumed one Brandywine fundholder, upset that Friess had parked 78%, or some $6.4 billion, of the fund's $8.2 billion in assets in cash for most of the first quarter. While the Standard & Poor's 500-stock index surged 13.5%, the Brandywine Fund was up only 2.8% in the first three months. Friess dived back into stocks in the second quarter and is now about 95% invested, and the year-to-date return as of July 14 is just 7.2%, vs. 21.4% for the S&P index.

BAILING OUT. Friess's woeful underperformance points up the danger of trying to time the stock market, even for seasoned pros with solid track records. The blunder has already prompted more than $2 billion in redemptions from the fund since January—nearly a quarter of its assets. Recapturing those dollars will not be easy. Most of the cash flow in the business goes to mutual funds with four- and five-star Morningstar ratings, and his fund is down to three. "If you're not humble in the investment business, you haven't been in it very long," says Friess, who runs Friess Associates Inc., with $11 billion in assets under management, from Jackson Hole, Wyo. "I take the blame for being wrong."

Friess insists that his objective was not market timing but saving his clients' assets. In the fourth quarter of 1997, his 35% weighting in shares of technology companies was getting hammered as the Asian crisis unfolded. A research trip to the Far East in January convinced Friess that Asian demand for U.S. products would dry up and that cheaper exports to the U.S. would put pressure on corporate profits and U.S. stock prices. He was right on the first two counts, but very wrong on the third. Even as first-quarter earnings slipped, the bulls kept running, he says, because of an onslaught of foreign investors seeking a haven in American stocks. "We missed the boat," the fund manager admits. "Our big mistake was not realizing the magnitude of foreign capital that would come to the U.S. ma

Then, realizing the blunder, F told his 30-member research st April to start crunching the nur to see if stocks looked any more a tive based on 1999 earnings estim and some did. Friess bought sha retail, consumer products, and fina service companies—all poised to on the strong domestic economy largely sheltered from the slowdo Asia. He also came back to techn stocks, but emphasized net ing and telecommunica shares instead of those depe on PC sales. Among the top ings now are Computer Sci Ascend Communications, Conseco. "We see powerful earnings coming from com that were not on our 1998 screen," says Friess.

"JUST TOO MUCH." Even if F can reignite his performanc controversial market-timing will linger. The trend in t vestment business is that pickers should stay fully inv and leave it to their clients cide how much cash they s hold. Mel Higgins, a pensio consultant in Cambridge, M pulled $5 million of his cl money out of the Brandy Fund after Friess disclose huge cash position. "We al had 9% cash, and when added in his cash, it was ju much," Higgins explained.

Although having so much was unusual, it was not unprece ed. The Brandywine prospectus that high cash levels may be us "temporary defensive purposes." Friess played that defense succes in the past—most recently in the bear market that followed Saddam sein's invasion of Kuwait. Madel Noveck, president of New York- Novos Planning Associates, has with Friess. She admits, however she would have sold her clients' s if she had known he intended heavily into cash. "He saw extrem and if you're not willing to allo that, you shouldn't be with a ma like him," says Noveck.

Of course, if Friess's fears had true, he would probably be a he fund folks right now, and not a And Friess also points out that, his performance lagged, he did no shareholders' money. But in a r bull market, that doesn't count for with investors.

By Andrew Osterland in Ch

BACK IN STOCKS: *Friess is playing catch-up*

BRANDYWINE'S STATS

ASSETS	$6.5 BILLION
SALES CHARGE	NONE
CATEGORY	MID-CAP GROWTH
EXPENSE RATIO	1.04%

	TOTAL RETURN*
1998	7.2%
LAST 12 MOS.	6.1
LAST 3 YRS.	15.9
LAST 5 YRS.	17.6
LAST 10 YRS.	18.1

*Appreciation plus reinvestment of dividends and capital gains before taxes; 1998 returns through July 14; others are annualized through June 30

DATA: MORNINGSTAR INC

How OneWorld helped Pericom put its finger on the pulse of supply chain management.

does a leader in high-speed circuits customer satisfaction a jolt? Pericom iconductor Corporation does it by omating their supply chain, from ufacturing through distribution and office financials. With OneWorld™ rprise software from J.D.Edwards.

According to Dan Wark, V.P. of Operations, "We wanted a partner that's going to be there for the long haul, one that's going to be an A-team, top-tier player. We're very pleased with having chosen J.D.Edwards."

Since the implementation of OneWorld, Pericom finds it easier to short-circuit problems and keep customers wired in. Says Wark, "Now customers get delivery quotes on-line and we can easily quote the status of any order."

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BY GENE G. MARCIAL

ASIA'S PHONES WHISPER PROMISE

Lilia Clemente hunts for undervalued growth stocks worldwide. And where is she finding them? Asia—believe it or not. "The region is more volatile than ever, in the wake of its economic woes. But it is where the bargains are," says the chairman of Clemente Capital, which runs two closed-end mutual funds listed on the Big Board. The company is based in New York and Beijing. The Clemente Global Growth Fund was ranked No. 1 by the Lipper Closed-End Funds Performance Analysis Service for 1997.

CLEMENTE: *"Where the bargains are"*

Clemente is high on four Asian telecom stocks that trade through American depositary receipts: China Telecom (Hong Kong) (CHL), Nippon Telegraph & Telephone (NTT), Philippine Long Distance Telephone (PHI), and South Korea's SK Telecom (SKM). The gloomy economic outlook, says Clemente, has turned them into low-risk, highly attractive assets. They all have slumped from earlier peaks. "These are companies with strong balance sheets and large capitalizations," she notes.

China Telecom, now at 33 a share, hit 42 in March. She says it may reach 45 in a year. "Compared with its peers in Europe and the U.S., it is cheap," says Clemente: It sells at a price-earnings ratio of 21, based on estimated 1999 earnings. The company provides cellular services to China's wealthy provinces and is expected to dominate the market, with its superior network coverage and solid subscriber base.

Nippon Telegraph, trading at 43—down from 52½—should snap back to 60 in a year, figures Clemente. The company dominates local and long-distance services in Japan but has yet to do business overseas. "Earnings are likely to improve with increasing mobile-phone traffic and rising demand for Internet services," says Clemente.

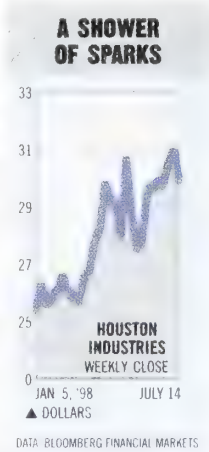
Philippine Long Distance dominates the country's domestic and international phone markets, including cellular services. The company uses its size to extract favorable interconnection fees and is able to control access to its own network. It is a "safe haven" for investors in Asia, says Clemente. Now at 23, the stock is down from its 52-week high of 34½. Clemente expects it will rebound to 35 in 12 months.

SK Telecom is South Korea's largest provider of mobile-telecom services. It plans to expand into computer and Internet communication. Currently at 6, the stock should climb to 10 in a year, figures Clemente, confident that by that time the government will have solved some of Korea's problems.

SPLICING IN STORE FOR HOUSTON?

The stock of Houston Industries (HOU), a diversified energy company, has been on a roll: It winged up from 20 in August last year to 31 on July 14. The rise in recent weeks stemmed from merger talk: PowerGen, Britain's second-largest electrical utility, was rumored to be in talks with Houston, and this got a lot of press in the U.S. and Europe in early June. But on June 29, PowerGen announced it had agreed to buy Britain's East Midlands Electricity for $3.5 billion from Dominion Resources in Richmond, Va.

Has that deal scuttled a PowerGen-Houston merger? Many analysts believe it has, including Edward Tirello Jr. of BT Alex. Brown, who says he's bullish on Houston for its fundamentals. But Steve Fleishman of Merrill Lynch Global Securities believes the talks are still alive. Internal goings-on at PowerGen indicate a deal is brewing, says the analyst. "Such a merger would create the first global powerhouse in the electricity industry," says Fleishman. The merged entity would have a market value of $17 billion, with operations on four continents. The geographical fit "would be superb," he adds, with PowerGen's beachheads in Europe and Asia and with Houston's strong position in the U.S. and Latin America. In addition, Houston's expertise in gas and retailing would mesh nicely with PowerGen's strength in generating, says Fleishman. PowerGen acknowledges it's looking for a U.S. partner. Houston declined comment.

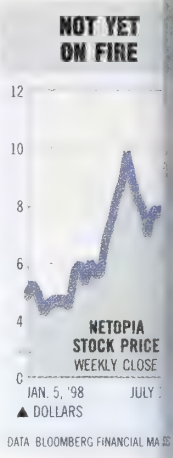


DATA: BLOOMBERG FINANCIAL MARKETS

NETOPIA: AN 'INTERNET SLEEPE

It's no secret that Internet stocks are on fire. But some pros are on alert for those still only smolder Nikos Theodosopolous, a top technol analyst at Warburg Dillon Read, says has discovered an "Internet sleep Netopia (NTPA) makes Internet ha ware and software products that hance the capabilities of small busin es and home-office users. Now trad at 7½ a share, Netopia should reach this year, he says.

The real wild card for Netopia is its Netopia Virtual Office software (NVO), which allows users—primarily home offices—to set up Web sites in seconds, at reasonably low cost. Netscape Communications and Netopia have signed a deal for Netscape to offer NVO as part of its services.



DATA: BLOOMBERG FINANCIAL MA

Netopia has also signed pacts w high-traffic Internet servers, such GeoCities and Earthlink Network provide NVO Web sites with content Net services. If NVO becomes a succ says Theodosopolous, the value of N opia will skyrocket. He figures Net will post a loss of 11¢ a share in fi 1998 on revenues of an estimated million. But he expects it will m money in 1999, earning 30¢ a share revenues of $60.5 million.

Netopia is expected to form allian with other Internet companies. Net CEO Alan Lefkof says he plans to up more major players to broaden N appeal. "Our goal is to have anyone a business card to have a Web sit his or her own," says Lefkof.

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TWARE

JAVA
I EVERY POT?

aims to make it the language of all smart appliances

eady for Java cars? Java credit cards? Java jewelry? Don't laugh. Suddenly, the mputer code from Microsystems n't just for cre- and running pro- s on computer rks. Now, as con- r-electronics cts go digital, Java ping into all sorts of s aimed squarely at st of us. ck out what's on the ng boards. Delphi notive Systems, the onics supplier owned neral Motors Corp., to offer carmakers a-based system to autos with features ice-activated E-mail avigation. Motorola xpects to use Java rything from pagers ell phones to chips run Java in such appliances as rs—some as early as this year. Dallas Semiconductor Corp. is mak- ring with a Java-encoded chip ould provide more secure access tel rooms or E-mail at public . Says Joan S. DeLuca, chief soft- strategist at Motorola's Semicon- r Products Sector: "We're not see- ing any limit to where Java can go."

McNEALY AND JAVA GIZMOS: *So far, Sun has a jump on Microsoft*

Neither does Sun Microsystems Chief Executive Scott G. McNealy, Java's biggest cheerleader. McNealy, who wears his own Java ring, aims to make Sun's three-year-old computer language the lingua franca for every imaginable digital device. "Never before have we had a technology that can span all these environments," crows McNealy. Even though Sun's bread-and-butter business is computers—big ones at that—its future may well turn on whether Java succeeds as the software to control new generations of smart consumer devices.

Why? For one, consumer electronics is potentially a huge market for Sun. The computer maker doesn't plan to build the devices itself. But such products using Java could sell by the millions. And at a buck or two royalty per unit to Sun plus the $300,000-and-up annual license and maintenance fees Sun charges companies to use Java, that could add up to huge high-margin revenues. Even better, all those networked devices will draw their smarts from services provided by speedy computers in the back room that may bear Sun logos. Says McNealy: "If Java prevails, we have a chance to provide those servers."

ARCHRIVAL. Just as important, consumer electronics may be the last place that Sun can make a stand against archrival Microsoft Corp., which has fought Sun's vision for Java every step of the way. Microsoft is working hard to make Windows CE, its stripped-down operating software for consumer devices, a standard for smart gadgets and other so-called embedded devices in which software works in the background.

Already, Microsoft has won several high-profile deals, such as handheld computers from Casio, Compaq, and others, as well as a video-game console from Sega, and some 5 million set-top boxes that cable giant Tele-Communications

VA GIVES
NSUMER
VICES
OLT
Sun's
ware,
rnet smarts
't just for
puters
more

COMMUNICATIONS

▶ Alcatel's Internet screenphone uses Java to deliver services such as home banking

▶ Motorola plans to use Java programs to connect wireless products

TV AND ENTERTAINMENT

▶ TCI will employ Java to program new services such as Net telephony for cable set-top boxes

▶ Sony will use Java to link digital audio-video products, TVs, and computers

AUTOMOBILES

▶ GM may use Java to link car systems such as navigation, climate control, and remote diagnostics

SMART CARDS AND JEWELRY

▶ Visa International has made Java the chief way to program services such as airline ticket purchases into smart cards

▶ Dallas Semiconductor sells Java-based rings, key chains, and other devices used for access control and credit card transactions

DATA: SUN MICROSYSTEMS, COMPANIES

Inc. plans to start shipping in mid-1999. CE also plays prominently in a Detroit venture called AutoPC, which is intended to give cars PC-like smarts. "Win CE is certainly going to be a player," says Greg Galanos, president of Metrowerks Inc. in Austin, which makes software that competes against CE. Meanwhile, Sun has struggled to get Java software out fast enough to consumers—in particular, a very small version that can run in devices such as printers, camcorders, and thermostats.

Even so, observers say Java, with 80 consumer licensees, has more momentum across a wider variety of products than CE. For instance, TCI will use Java as the programming standard in all 12 million of its set-top boxes, making CE play second fiddle to Java. And last month, a European mobile-phone venture of Nokia, Telefon A. B., and L. M. Ericsson spurned CE and chose software from England's Psion PLC, which will use Java. "Java has so much investment being thrown at it," says Dataquest Inc. analyst Larry Perlstein.

NET KIOSKS. Already, Java is starting to percolate into other kinds of devices (table, page 71). Visa International's first Java smart card, issued in June by Singapore's Standard Chartered Bank, lets holders make Net purchases from a kiosk, for instance. Smart-card maker Gemplus has backed Java, and on July 14, NEC Corp. said it will also employ Java in its cards. France's Alcatel is using Java to give its Internet Screenphone the ability to receive E-mail, let people buy online, and allow phone companies to upgrade calling services by sending out Java programs. The $500 phone will go on sale in Europe this fall and in the U. S. early next year.

The big question: Will these devices appeal to consumers? So far, Net appliances have been a bust—too expensive or cumbersome. But that could change soon. Market researcher International Data Corp. reckons sales of Net appliances, such as Web phones and set-top boxes, will explode, from 1.4 million last year to 42 million in 2002—not far below projected U. S. PC sales that year of 56 million.

How many of these appliances will use Java, nobody knows—but McNealy is shooting for the whole enchilada. He won't get what he wants, of course—not with Microsoft Chairman Bill Gates's big bucks behind Windows. But, vows McNealy, "we're going to continue to spend like crazy on Java technology." Crazy like a fox?

By Robert D. Hof in Mountain View, Calif., with Roger Crockett in Chicago

THE INTERNET

THE WEB GIANT NOBODY KNOWS

Venture fund CMG has a knack for picking hot Net spot

Forget Silicon Valley's venture-capital powerhouses for a minute and check out the Boston suburb of North Andover, Mass. That's where CMG Information Services Inc. CEO and Chairman David S. Wetherell set up the company's first Internet venture fund in 1995. Now, the little-known investment and holding company's Net startups are coming into their own. Take CMG's 80% investment in America's No. 4 search engine company Lycos Inc. It paid $2 million three years ago, when search engines were still being tinkered on in garages. Today, CMG's 30% stake is worth $390 million, and it could go higher if Lycos strikes a widely anticipated partnership with CBS, Time Warner Inc., or another major media company.

When combined, the sites CM has stakes in rank third in Ne traffic, after Microsoft and A

WETHERELL: OUT TO MAXIMIZE "EYEBALL TIME"

That's just the most prominent of CMG's 24 investments, running from the Engage Technologies service, used by Web site operators to collect and analyze user data, to GeoCities, the third most popular Web site, where consumers can set up home pages. When combined, the companies CMG has stakes in rank third in total Internet traffic, behind America Online Inc. and Microsoft Corp.'s Web sites. That has spurred such interest that CMG's third investment fund, which totals $150 million and closes in mid-August, will be the first to include outside investors.

With characteristic lack of fanfare, the 43-year-old Wetherell has quietly become a major force on the Web. As an Internet landlord, CMG has val stakes in some of the most popula tual real estate on the Web. Wetherell has bigger plans: to sp wired network of companies that together to zero in on an indivi tastes, deliver targeted ads, met ternet traffic, and enable electronic merce. The goal driving CMG's in ments, he says, is "to bring tog

ost eyeball time and measure it accurately than anyone else."

tty grand for a mathematics grad- who started CMG in 1986 when he t College Marketing Group, which sts of college professors and their s to book publishers. From there, ranched out into direct market- tting on the Internet in 1994. An Internet browser program Weth- nanced, called BookLink, was sold that year for $30 million in stock. while AOL buried Wetherell's pro- an early casualty of the browser Wetherell sold his stock and in- the proceeds in Lycos, a startup Carnegie Mellon University.

many of these nowadays, CMG's profits are nonexistent—it recorded a net loss of $22.8 million last year and has no earnings in sight. Paul Noglows, an analyst with Hambrecht & Quist, expects the company to record a net loss of $28.4 million on revenues of $85 million for fiscal 1998, ending July 31.

CLOSE LINKS. On the surface, Wetherell's strategy looks similar to that of Microsoft co-founder Paul Allen's Vulcan Ventures Inc., which invests in a complementary set of companies that sometimes share customers, partners, and technologies. But Vulcan hasn't exactly set the world on fire using that approach. One crucial difference is that while the companies in Vulcan's portfolio may not pay off for 10 years, analysts expect CMG to spin off as many as six IPOs in the next 18 months, starting with GeoCities later this year.

Still, some venture capitalists see pitfalls in Wetherell's efforts to build a network of companies that are tightly linked. "It's pretty difficult to dictate mutual strategies to a greater end and have it benefit shareholders of both companies," says Jeff Brody, partner at Brentwood Venture Capital, a Los Angeles-based firm. Counters Robert J. Davis, CEO of Lycos: "We share where it makes sense, and through CMG we get great exposure to emerging companies and technologies."

CMG also has to prove its strategy can be maintained over time. The company, whose oldest investment spans three years, is new to the game of funding startups and following them as they grow and change. "The challenge for CMG will be to continue to build out their network of companies, since they are still a relatively young fund," says Jennifer Fonstad, an associate with venture-capital firm Draper Fisher Jurvetson in Redwood City, Calif. "That's the only way to validate their model."

CMG's appeal, investors say, is the prospect that early-stage investments will pay off in initial public offerings or acquisitions, boosting the value of CMG shares and generating shareholder dividends. But with so much riding on IPOs and mergers, a meltdown in Internet stocks or a chill in the IPO market could hit CMG hard. Meanwhile, the pressure to demonstrate growth has risen with CMG's stock price. "Some of these investments would have to grow into monster companies to have an impact on the stock price," says analyst Sherri L. Wolf of Adams Harkness & Hill Inc.

MATCHMAKER. Unlike many hands-off venture-capital firms, CMG is taking an active role in making that happen. It provides crucial introductions, as in the case of Silknet, a three-year-old startup based in Manchester, N. H. The company, which provides customer service over the Web, added CMG-investor Microsoft to its list of customers on July 1. Similarly, when Japanese conglomerate Sumitomo Corp., another CMG investor, was looking for a way to deliver ads to an Internet browser on Japan's largest Internet service provider, Internet Initiative Japan (IIJ), Wetherell steered them to ADSmart, a CMG company used by advertisers to deliver ads on Web sites.

And Wetherell isn't shy about using his influence to make things happen. Engage was ready to roll out its consumer profiling technology last spring, but Lycos, an obvious target customer, had its hands full digesting acquisitions, including community service Web site Tripod Inc. Then, CMG asked Lycos to make working with Engage a priority, and in six weeks, Lycos delivered half of the 19 million visitor profiles in Engage's growing database. "Because CMG wanted Engage to ramp up, it became a priority," says Engage CEO Paul Schaut. But executives at the affiliates say they aren't forced to work together. Says Bo Peabody, CEO of Tripod: "In an industry like the Internet, you need to be free to make adjustments very fast." CMG has shown it's nimble. Now, it has to show it has staying power as well.

By Paul C. Judge in Boston

CMG's Wired World of Investments

	VALUE AND 1998 REVENUE (MILLIONS)
LYCOS Search engine and community service that is the seventh most visited Web site. CMG STAKE: 30%	$1,300 $62 *
GEOCITIES Most popular site for users to build home pages, IPO pending. CMG STAKE: 34%	$1,000 * $25 *
ENGAGE TECHNOLOGIES Service used by Web sites to place and target ads. CMG STAKE: 100%	$300 * $15 *
SILKNET SOFTWARE Web customer service software. Customers include Microsoft, NationsBank. CMG STAKE: 24%	$60* $5 *

*Estimated

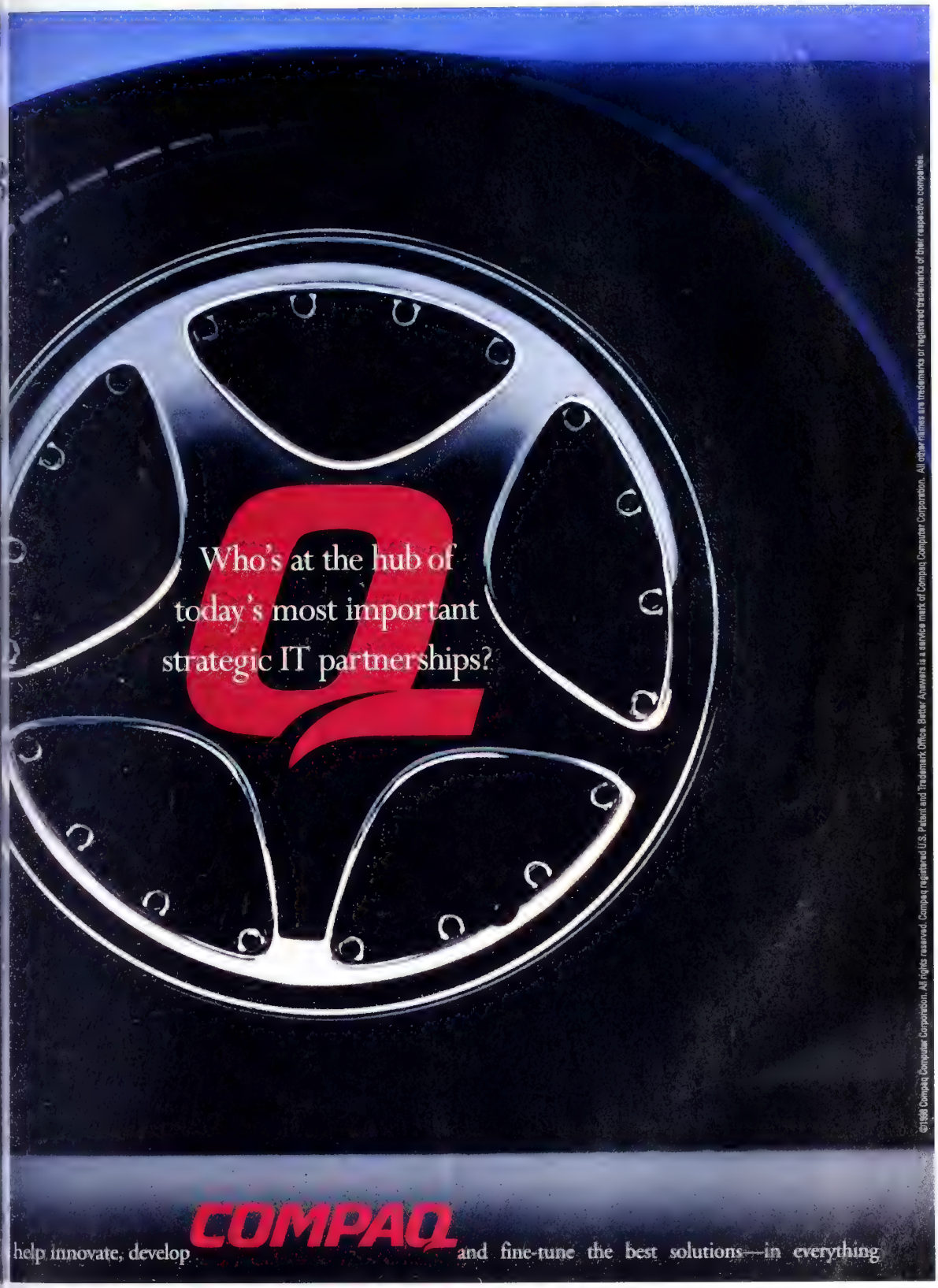
DATA: COMPANY REPORTS, ANALYSTS, BUSINESS WEEK

lay, publicly traded CMG functions n Internet mutual fund, taking g or full ownership stakes in com- s. Even though several CMG com- s have yet to prove they're sur- s, only one—free E-mail provider nark—has failed. "Venture capital- re doing well if 75% of their com- s go belly-up," says Ullas Naik, an st at First Albany Corp. The mu- nd approach has caused investors e into CMG's stock during the past sending it up more than tenfold, to nd it has drawn some powerful rs, including Intel Corp. and Mi- ft, CMG's third- and fourth-largest tors, respectively.

nat exactly are investors buying? s a pure Internet play. And, like so

DAVIS: *CMG gives Lycos "great exposure"*

from Internet commerce to mission-critical applications in finance, communications, manufacturing and b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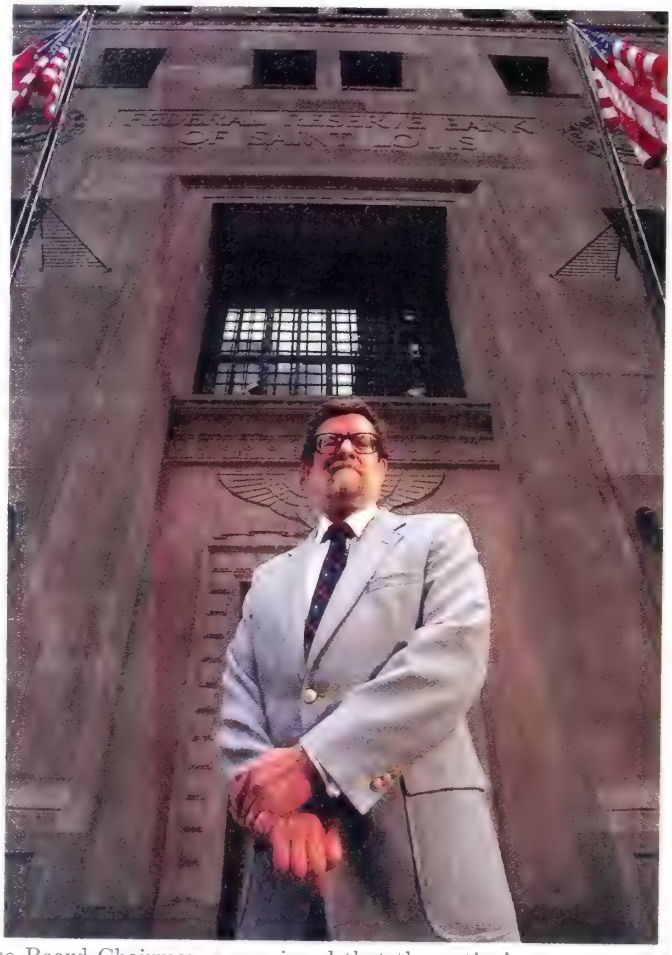
MONETARY POLICY

RATTLING GREENSPAN & CO.

The Fed's William Poole could lead a monetarist revival

A sailing buff since boyhood, Federal Reserve Bank of St. Louis President William Poole loves to race his old-fashioned Thistle, the *Adam S.* The classic three-person dinghy was in vogue during the 1950s and '60s but was eclipsed long ago by sleeker designs. Poole's economic views are somewhat retro, too: He is a disciple of monetarism, a school of thought that had its heyday in the '70s and '80s.



But while his views may be out of intellectual fashion, Poole is suddenly in a position to affect the course of U.S. monetary policy. Just eight weeks after being hired by the board of the St. Louis Fed, Poole parted with Federal Reserve Board Chairman Alan Greenspan, dissenting from the May 19 decision of the Federal Open Market Committee to keep interest rates unchanged. He advocated an increase. Poole's dissent suggests that given his concerns about the rapid growth in the money supply and bank lending, he'd be reluctant to support a rate cut even if conditions in Asia weaken further.

MAKING ALLIES. It's rare for an FOMC member to dissent so soon after joining the policymaking group. But Poole, a respected economist from Brown University with long ties to the Fed, is convinced that the nation's money supply still provides the best map for steering clear of inflation—and he isn't being shy about it. "I felt completely comfortable speaking my mind and voting my best judgment," he said in a July 13 interview with BUSINESS WEEK.

Poole was joined in his May dissent by fellow monetarist Jerry L. Jordan, the veteran president of the Cleveland Fed. They fretted that the surge in the money supply and bank credit could cause an outburst of inflation. Given the "substantial monetary acceleration and accommodative financial conditions, we would be better off if we had a less accommodative posture at this p Poole says.

Fed watchers believe that if m growth remains strong, Poole and dan may have other allies, inclu Kansas City Fed President Thom Hoenig, who has monetarist lea and, like Poole and Jordan, is a v FOMC member. "This is the year the monetarists are cycling in," former Federal Reserve Gov Lawrence B. Lindsey, referring t yearly rotation in which 5 of the gional bank presidents vote with seven governo Washington. monetary a gates are cl signaling 3% t inflation next so if you're a m tarist, you'd ha favor tighteni

Before P arrival, Jordan little sway i years on the mittee, perha part because colleagues viev as too doctrin Poole is consi more pragm Together, they have a subtl pact over tim Greenspan, wh til May had been challeng two dissenter single meeting 1994. (The won't disclos vote at the J FOMC meeting August.)

To be Greenspan wields enor power over FOMC. His eclectic approach to tary policy has kept the econom panding for seven years, while inf has fallen—the consumer price rose just 0.1% in June. Greenspan ably could garner enough votes rate cut if he decided one was ess because of a crisis in Asia or a U.S. slowdown. But he's unlike push one through over substanti position, because he knows the cial markets would get spooked FOMC were sharply split. The tarists' defense "rules out any of a preemptive easing," says Dav Jones, chief economist for Aubr

WILLIAM POOLE

AGE 61

PRESIDENT Federal Reserve Bank of St. Louis, March, 1998-present

PROFESSOR Brown University, 1974-82, 1985-98

MEMBER Shadow Open Market Committee, 1985-98

MEMBER President Reagan's Council of Economic Advisers, 1982-85

STAFF ECONOMIST Federal Reserve Board, 1964-74

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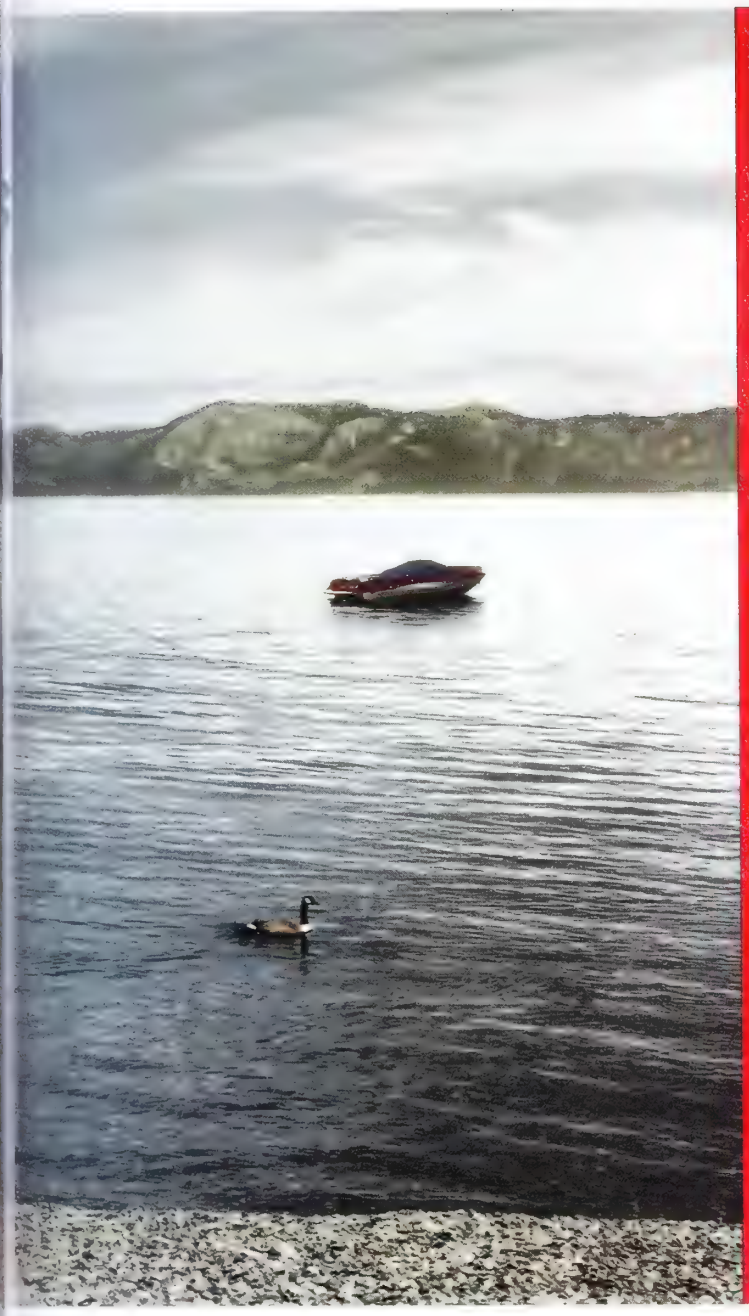

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Economics

Lanston & Co. "Their willingness to go public will serve as a rallying point for other hawks on the FOMC."

Poole's presence on the FOMC is making the money supply a bigger factor in the Fed's internal debates over monetary policy. Monetarists such as Poole have expressed concern that the monetary aggregate known as M2 has risen 7% over the past year. (M2 includes cash and checking accounts as well as savings and retail money-market accounts and certificates of deposit for less than $100,000.) Greenspan, in contrast, publicly disavowed M2 as a policy gauge in the early '90s, arguing that its predictive value was spoiled by changes in the way Americans chose to hold money. Although Greenspan recently has noted "tentative signs" that the relationship between money growth and economic output is reemerging, he says it is "uncertain how reliable that relationship will prove to be over time."

Poole has long worked to make money measures more useful. In the early 1990s, he helped develop what is now a widely followed indicator—which he dubbed MZM, for "money zero maturity"—that tracks M2 plus money-market funds held by institutions, and minus certificates of deposit. It's intended to measure all holdings that can be converted to spending money without penalties or risk of capital loss. Some Fed economists believe that MZM is a better measure of liquid money than M2 because it excludes CDs, which investors can't instantly cash in. The past year's 11.5% surge in MZM offers further proof to monetarists that money growth is too strong.

The affable Poole, who holds an economics PhD from the University of Chicago, leaves no doubt that the Fed should worry more about money-supply growth, even with inflation measures at low ebb. "We need to be looking down the pike, a year to three years ahead," he says. What about Asia? Poole doesn't believe the Fed should hold domestic policy hostage to that region's turmoil. "Our respons is first and foremost U. S.," he says. "We do the international my any favors if we our economy to g track."

JOIN THE CLUB

Jordan now has a monetarist ally at the central bank

NO NOVICE. Such ou ken views aren't nor aired by new FOMC bers, who often bow institutional pressure with the flow. But Po hardly your typical bank president. Whil eral current Fed pres rose through the sys administrative rout overseeing check pr ing, Poole attended hi FOMC meeting when he was a Fe economist in the early 1970s.

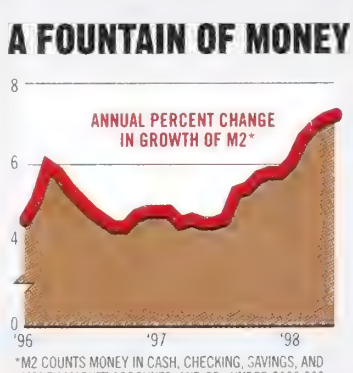
During that stint, Poole, at a finished what San Francisco Fed ident Robert T. Parry praises seminal piece of research." The pa reflecting a less-than-pure bra monetarism—argues that c bankers should monitor the rel ship of both interest rates and growth to economic activity and give more weight to the more t linked of the two indicators in s policy. With the Asian crisis tem ily distorting interest rates, P model would augur for stressin money stock.

In the decades since his firs job, Poole has taught at Brown, as Jordan's successor on Ronald gan's White House Council of Ec ic Advisers, and been an outsid viser to New York Fed Pres William J. McDonough. Occasio Poole even urged McDonough to dissenting vote on the FOMC—t the New York Fed chief never h

Poole knows that dissents are effective when used sparingly sources say he ered a strong w about inflation when he joine FOMC on Mar. 3 says Poole, "I want to dissent first meeting." other hand, as a sailor, Poole cer knows that against the w sometimes the way to reach destination.

By Dean in Wash

A FOUNTAIN OF MONEY



*M2 COUNTS MONEY IN CASH, CHECKING, SAVINGS, AND MONEY MARKET ACCOUNTS, AND CDs UNDER $100,000

DATA: BLOOMBERG FINANCIAL MARKETS

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– Christopher Reeve
Vice Chairman of N.O.D.

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NFESSIONS OF ANTASY BASEBALL JUNKIE

vn online Billy Martin chronicles his run for the pennant

ite setting a record for the most ıs scored, the All-Star Game on y 7 was a dud. Neither Mark e nor Ken Griffey Jr., the two s chasing Roger Maris' home- ord, was able to launch one out er's hitter-friendly Coors Field. 'or me, the game was a smash. Galarraga, Tom Glavine, and the my guys left Denver without a Better yet, Sammy Sosa didn't ay, resting his sore shoulder he could batter National pitchers after the sea- amed.

an estimated 400,000 Billy Martins, I am ager of a team in one fantasy baseball popping up all over ernet. As I write this, b, the Psycho Rons sk), enjoys a shaky lead line other teams in n's League 3965—and a ıot at the pennant, I dd.

CHILD. Office s and beer bud- ave played in , or rotisserie, for years. But if indication, a new ion of onetime jocks and ins is using its computers iscover sports. Even I was a high school and player with vague visions of a 'eer, until recently I was only ware of what was going on in l. Today, I scour the sports pages vs that my relief pitcher, Todd f Detroit, has chalked up a save ory.

g the way, I've also become a child for the interactive genera- nce April, I have signed up for ams. That's $54.90 in fees I've ESPN's parent, Walt Disney Co. here's the new Pentium I bought d up the action, and the added line my teenage daughter, eth, insisted we put in for the ter. Now, I am contemplating espn.com's Premium Service, a $39.95 tip sheet that the ads say is filled with inside dope that might help me ward off the advance of a team called Will Cordero's Hit Parade.

"Fantasy sports is a small niche that is very deep," says Patrick Keane, an Internet analyst at Jupiter Communications, online consultants. "There are nuts there who will spend a lot on their obsessions." Still, like most businesses on the Internet, fantasy sports is not yet profitable. But CNN, CBS, Fox, and *The Sporting News* all market their own versions, ranging from the freebie you can get on cnn.com to the all-frills, stats-at-every-turn model that foxsport.com offers for $89.95. "We look at the fantasy league as a way to build traffic to our site," says Steve Zales of cnnsi.com, which claims more than 290,000 players for its free game.

The espn.com game is simple: You draft 25 players by listing more than 200 prospects in the order you want them. Then you hope your top choices still are around when the draft rotates to you. Each day, you amass points for categories such as the homers and runs batted in by your hitters, the wins and saves of your pitchers, and the bases stolen by your runners. Only 22 members of your team can play at a time; the others sit in the virtual dugout.

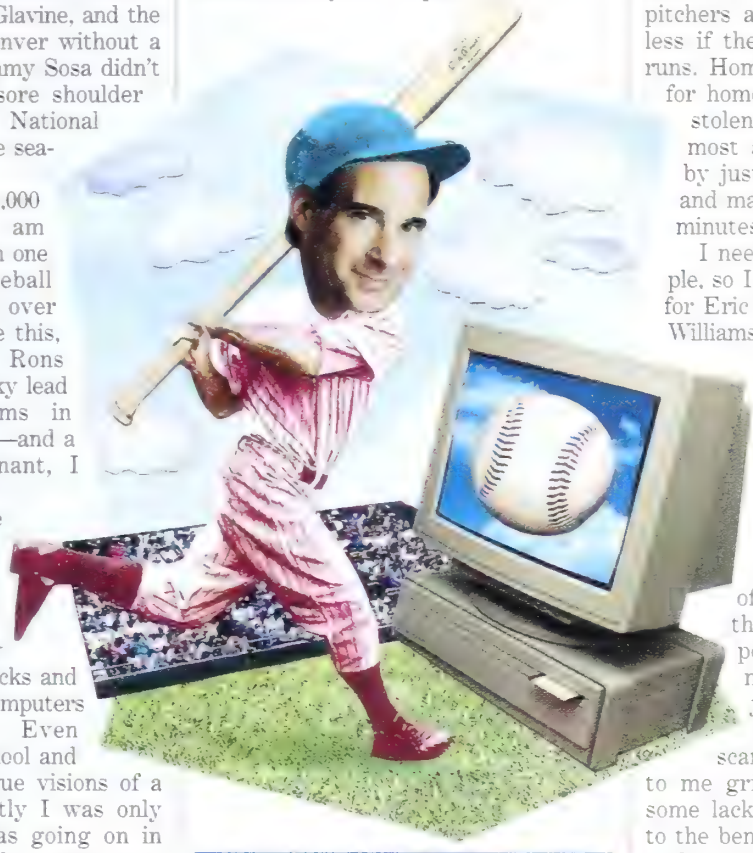
IN FIRST PLACE. Mastering the subtleties of the game is crucial. Winning pitchers are great, but they're worth less if they give up a lot of hits and runs. Home-run hitters get you points for homers and RBIs but nothing for stolen bases. Still, you can cure almost any deficiency in your team by just E-mailing an opposing club and making a smart trade—often in minutes.

I needed a base-stealer, for example, so I traded slugger Matt Williams for Eric Young. Not a bad deal, since Williams wasn't hitting up to his usual standards. But how could I know that just days later Young would wind up on the disabled list for two weeks?

So now I'm clinging to first place by the barest of margins. I log on constantly in search of discarded players. But this takes time, lots of it. Already, it's cutting into the workday. At home, my poor wife, Valerie, goes to bed most nights ahead of me as I juggle my lineup. And on plenty of mornings while I scan the stats, she has to listen to me griping when I discover that some lackluster player I've consigned to the bench hit two homers and drove in five runs.

But oh, do the lords of the Internet love me. I log on often, fattening rating numbers for advertisers. And as the race goes down to the wire, you know I'll sign up for something I shouldn't in hopes of getting that special edge. For now, Valerie takes comfort in knowing that the baseball season ends in three months. I haven't bothered to tell her that they're already promoting fantasy football. I wonder what kind of season Brett Favre is gonna have...

By Ronald Grover in Los Angeles



GROVER AT BAT

"Oh, do the lords of the Internet love me. I log on often, fattening rating numbers for advertisers"

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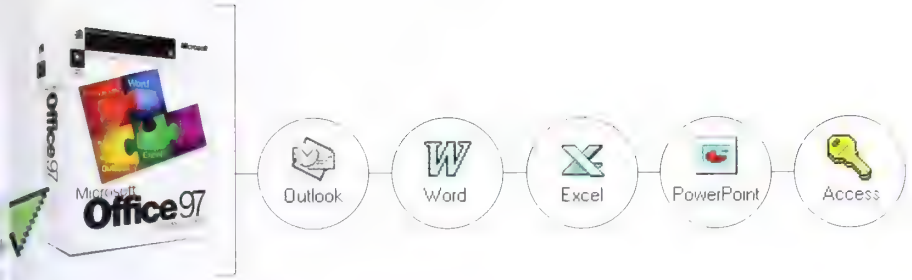

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EDITED BY AMY DUNKIN

LET THE WEB MIND YOUR PORTFOLIO

INVESTING

Charles Lynch keeps track of his 15 or so mutual funds the old-fashioned way—on paper. "I'm pretty much a No. 2 pencil pusher," says the 70-year-old retired graphic-arts sales executive from Sun City, Ariz. Problem is, the manual method is time-consuming. So lately Lynch has looked into computerizing his investment records. "It's definitely an expedient way to go," he says.

Yet if he leaps into cyberspace, Lynch will find a bewildering array of portfolio trackers. Beyond such packaged financial-planning software as Intuit's Quicken, a myriad of Internet sites now beckon with portfolio tools. While most offer basic service for free, it's not easy to pinpoint the sites that prove helpful when you want to figure out, say, how much you've got in large-cap stocks or even how much your investments gained this year. Alternatively, some sites that charge monthly fees, including Standard & Poor's Personal Wealth (like BUSINESS WEEK, a unit of The McGraw-Hill Cos.), offer no-frills free portfolio tools while saving their distinctive features for subscribers.

FREEBIES. To help you find the online portfolio tracker best suited to you, BUSINESS WEEK scrutinized dozens. In the end, we found five free standouts (table). Each boasts at least one differentiating feature, whether it's ease of use or exceptional analytic ability. Among the leaders, though, one is clearly superior in richness of detail and design: Microsoft Investor's Portfolio Manager.

The tools typically work by asking you to enter the ticker symbols of your stocks and mutual funds along with the number of shares you hold, your average cost, and, usually, any commission you paid. In return, the portfolio trackers use slightly delayed stock quotes to update the value of each holding and the overall portfolio, and to calculate gains and losses.

Microsoft Investor goes well beyond that widely available, stripped-down model. For example, it allows you to import records from many versions of the popular Quicken financial-planning software as well as from its own Microsoft Money. That's a huge time saving if you already have trading records entered in one of those programs. Overall, the site proved swift, easy to customize, and quite intelligent at aiding investors.

One prime example is how easily it allows you to track each stock or fund lot you buy or sell at different prices on different days—critical data to garner the best tax treatment for your investments. It's also a standout at monitoring employee stock options, even giving you the choice of tracking all your options or simply those that are vested. And it will automatically update your portfolio when your stocks or funds split, pay dividends, or distribute capital gains.

These seem like silly details until you have tried to keep track of a portfolio manually, entering fract shares of reinvested dividends that stretc four decimal places. B do this on account state of course, but if you h vestments with more one fiduciary, bringi those data together to a complete picture of portfolio can be a nigh

soft Investor eases cess further by offer- rnet links to discount Charles Schwab and , with more on the e feature is supposed to post your brokerage statement directly in your on-

folio. "Over time, this he way people do it, y," predicts Microsoft r's Product Manager enigsbauer.
id find some nits to h Microsoft Investor. f insider trades and esearch features you for free at, say, Yanance, are available only to subscribers, who pay $9.95 monthly for a premium service. The portfolio tool works a bit better with Microsoft's browser, Internet Explorer, than with rival Netscape's Navigator. Macintosh users, meanwhile, only have access to a pale imitation of the full-featured tool. Also, if you use Quicken for Mac, you won't be able to import your data. Instead, you would have to enter them keystroke by tedious keystroke.

Curiously, that issue remains unresolved at Quicken's own site, which in some ways proved the most disappointing of the top five. Glaringly, Quicken's online portfolio keeper offers no way to move data to and from Quicken's desktop software. Product Manager Tapan Bhat says such problems are being corrected: "You can be sure that it will be much more seamless," he says. The tracker does, however, boast neat tools to analyze your portfolio's asset allocation, and offers some sound investment guidance.

Such features often come at the expense of speed. If time is of the essence, check out Yahoo! Finance, perhaps the swiftest of the leading sites and easily the most popular. It has little in the way of graphics, yet it offers many ways to customize what you see. It also has links to an impressive collection of free research data, such as details on trades made by company insiders. Yahoo! Finance creates none of its own editorial matter, aiming instead to "aggregate best-of-breed content," as site Producer Michael Riley puts it.

Morningstar, the Chicago-based investment research firm, takes a different approach. It hopes to entice investors to pay $9.95 a month, or $99 a year, for a premium service at Morningstar.Net with several proprietary features, including its "X-ray" functions. These work by drilling into the Morningstar database to learn, for instance, how much you're paying annually in fees, loads, and other expenses for your funds.

PERSONAL DATA. We put together a four-fund portfolio and checked Morningstar to see what it would cost to own. The X-ray told us our portfolio's overall expense ratio would be 0.25% of assets and then contrasted it to the average portfolio of comparable funds, whose expenses would run 1.17%. Another example: The site's X-ray can look at your individual stocks and stocks held by your funds to figure out how exposed you are in the aggregate to, say, Asia.

One potentially worrisome aspect of many sites, including Morningstar and Yahoo! Finance, is that you're forced to send off to their computers scads of personal financial information. Operators of these sites say the data are kept safely behind a password-protected firewall and, in any case, could not be used in a way you don't want.

If you remain dubious, however, you might want to try out CNNfn's Investment Tracker. It uses Marimba's Castanet software, which allows you to leave your personal financial data on your own computer. The CNNfn tracker then simply downloads prices and news each time you choose to update your records.

Intrigued, we tested it extensively. It took hours to get the CNNfn tracker to work right. Annoyingly, it kept automatically dialing up the Internet long after we had quit the program. Also, its functions are more limited than the other sites'. Beyond privacy, though, CNNfn offers one distinct advantage: The Castanet software allows you to launch the portfolio program offline—handy if you're working with a laptop on an airplane or are otherwise unable to get connected. Once you do get a connection, you can update the portfolio on prices or news.

The more trading history you can feed into a portfolio tracker—especially Microsoft's—the more powerful it becomes. Going online can give you a firmer grip on your investments. And it sure beats a No. 2 pencil. *Robert Barker*

Online Portfolio Trackers

These free sites offer distinctive tools to help you follow your investments

WEB SITE	COMMENTS
CNNFN cnnfn.com/marimba	Can be used offline, buggy technology, few features
MICROSOFT INVESTOR* investor.msn.com	Comprehensive, excellent charts, fee for some data others give away
MORNINGSTAR** www.morningstar.net	Superb portfolio analysis; tracks just stocks, funds, cash
QUICKEN quicken.com	Helpful investment guidance, no interchange with Quicken software
YAHOO! FINANCE quote.yahoo.com	Swift, easy, flexible, no proprietary analytical tools

*$9.95/mo. for premium service; $6.95 for Microsoft Network subscribers.
**$9.95/mo. for premium service.

DATA: BUSINESS WEEK

YES, THERE ARE STILL CHEAP NET PLAYS

Amid the hoopla over soaring Internet stocks, one related group–companies that provide network and enterprise security software worldwide—has trailed the pack. That's odd, points out Marc Usem, Internet analyst at Salomon Smith Barney, since most of the hottest Net plays have yet to post any profits and "the security-related companies already have substantial earnings."

But this disparity may not last. As the Internet expands, more and more companies will need systems to protect their networks from external and internal threats. That suggests security companies may be one of the few ways that you can still participate in the growth of the Net on the cheap, if you invest promptly.

SMART MONEY

BREEDING GROUND. Many of the top security companies are based in Israel, and many are traded on the NASDAQ stock market (table). The companies were founded by former members of the Israeli Defense Forces' crack intelligence units, which served as a "training ground for security solutions based on cutting-edge encryption and data-transfer technology," says Zeev Holtzman, president of Giza, a Tel Aviv investment bank. "Israel has the potential to be the world leader in the Internet and enterprise security field," says Gil Shwed, president of Check Point Software Technologies, the top maker of firewall products that protect corporate networks from external attack.

Despite the company's 40% share of the world firewall market, earnings of 41¢ a share in the first quarter, and a wide following among institutional investors, Check Point shareholders have had little to cheer about lately. At almost $32, Check Point fetches two-thirds of what it traded for last November. It carries a price-earnings ratio of 21.5, a fraction of the sky-high multiples awarded to Amazon.com, Yahoo!, and Lycos.

Behind the drop in Check Point are concerns that Microsoft will enter the security market. However, Check Point and Microsoft recently announced an expansion of an existing cooperation agreement. Gibbs Moody, enterprise software analyst for UBS Securities in San Francisco, is a fan of Check Point stock. He thinks the stock could return to $50 in the next 12 months and adds that if its valuation doesn't improve, Check Point could become a takeover target.

Another leading security player is Memco, whose products guard corporate network servers against internal assaults. Its stock took a beating recently after Memco shelled out $55 million to acquire AbirNet, another Israeli security company, and Network Information Technology (NIT), a potential competitor based in Saratoga, Calif. In the aftermath, Memco's shares are hovering around $18, near its 12-month low. Elan[...]tovsky, Israeli technol[...] alyst at Goldman [...] thinks Memco—alon[...] Check Point—is a b[...] "Both have strong p[...] earnings growth ov[...] next couple of year[...] says. Zivotovsky [...] Memco could see its [...]ings per share dou[...] $1.10, in 1999, driv[...] shares to $35. He als[...] what he sees of Ne[...]mension Software, a s[...] management softwar[...]pany that recently e[...] the security field.

ON THE PROWL. Mem[...] the only company p[...] Israel for security i[...] takeovers. In Nov[...] Cylink, a California [...] network security co[...] ponied up $82.7 mill[...] privately held Algo[...] Research. "All the [...] computer and softwa[...]panies are on the look[...] Israeli security techno[...] says an investment ba[...] Tel Aviv. Intel, in fa[...]cently invested an und[...] sum in RadGuard, a d[...]er in Tel Aviv of secu[...] products for private [...]rate networks. JAFCO, [...] largest venture capit[...] has also invested in [...] Aviv startup, and ther[...] the company could go [...] next year.

Another promising [...]up that may announce [...]tial public offering i[...] Access, based in H[...] venture capital fund [...] by Sun Microsysten[...] Germany's Siemens [...]ready invested $1.5 [...] in the company, whose [...]ity smart cards" authe[...] computer users from [...]tance of several yard[...] credit-card-size car[...] away with the need f[...]words and shut down [...]tem when you walk [...] barring access to u[...]rized users. Whether [...] First Access actuall[...] public, it's no secre[...] plenty of other Israe[...]rity plays are selli[...] prices that won't ma[...] wince.

Neal S[...]

Five Israeli Contenders

COMPANY/NASDAQ TICKER SYMBOL	CURRENT PRICE*	52-WEEK HIGH	P-E RATIO**
ALADDIN KNOWLEDGE SYSTEMS (ALDNF) Computer security systems	11¾	17¼	11.5
CHECK POINT SOFTWARE (CHKPF) Builds corporate firewalls	31¼	50½	21.5
FUNDTECH (FNDTF) Secure transaction software	18¾	25¼	42.0
MEMCO SOFTWARE (MEMCF) Provides client-server security	18¼	32¼	35.5
NEW DIMENSION SOFTWARE (DDDDF) Manages security systems	29¼	35¼	20.9

*July 13, 1998 **Estimated 1998 earnings DATA: BLOOMBERG FINANCIAL MARKETS

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1998 RACE SCHEDULE

May 7	New York City #1
May 21	Albany, NY
June 11	Rochester, NY
June 17	Frankfurt, Germany
June 24	New York City #2
June 25	Buffalo, NY
June 30	Newark, NJ*
July 9	London, England
July 16	Binghamton, NY
July 21	Stamford, CT
July 23	Morristown, NJ
July 28	Long Island, NY
July 29	New York City #3
July 30	Boston, MA
August 4	Syracuse, NY
August 6	Chicago, IL
August 12	San Francisco, CA
August 18	Paramus, NJ
Sept. 10	Atlanta, GA*
October 3	Championship, New York City

* Licensing Agreement.
Dates are subject to change.

The New York Times · The Athlete's Foot · AmericanAirlines · PowerBar · BusinessWeek · TIFFANY & CO. · SAUCONY

NURSING HOME: *Policies now cover such illnesses as Alzheimer's*

LONG-TERM-CARE COVERAGE CATCHES ON

When you dream of retirement, you no doubt see yourself traveling, exercising, and maintaining an active and independent life. But what if your health fails? If your lot is to live many years in a debilitated state, who will take care of you, and how will you pay for care?

INSURANCE

To take away the worry, more people are purchasing long-term care insurance. This form of health coverage picks up the tab if you need to go into a nursing home or require home care but have too much money to qualify for Medicaid. The good news is that over the years, the policies have become more flexible and now cover common conditions once excluded, such as Alzheimer's disease.

GOOD CANDIDATES. The coverage isn't cheap. Depending on your age, the features you select, and the cost of care in your region, you can expect to pay annual premiums of $500 in your 50s and up to $3,000 in your 70s. It makes the most sense for middle- to upper-middle-income people who can handle the premiums but who couldn't easily afford the care. Policies appeal to couples worried that if one spouse becomes ill, the healthy spouse would struggle to cover the cost of care. They also attract people who want to leave an inheritance. For New York City, which has among the highest nursing-home costs in the U.S., couples with $500,000 to $1.5 million in assets are good candidates for this insurance, says financial planner Joel Isaacson.

An independent insurance agent can walk you through your options and show you quotes from several companies. "Given that almost everybody wants home care, as a critical starting point you have to know how much home care a policy pays for and how flexible it is," says Alfred Clapp, an insurance broker and financial planner in New York.

Some plans allow you to spend only 50% of the benefit on home care. So if you bought $110 a day of nursing-home coverage, the policy would pay $55 for care at home. The problem is "because of the high level of services that can be provided," home care can easily amount to 80% of the coverage, says Nancy Magee, vice-president for long-term care products at Unum Life Insurance. So you may want to choose insurance that will pay 100%. Plenty of policies will pay for licensed agencies to provide home care. But through Unum, you can now buy a plan that covers care from the individual of your choice. Clapp believes clients can hire better-quality health assistants if they aren't required to use an agency.

You can also specify how long coverage will last. Four years is average, though you can buy a lifetime plan. John Hancock Mutual Life Insurance offers a "shared care" rider, so if one spouse needs six years of care under a four-year deal, the couple can dip into the other's time to fund the extra two years.

Although it makes the policies more expensive, many experts believe you should purchase an inflation rider so your coverage keeps pace with rising costs. If you want to save on price, Isaacson recommends extending your "elimination," or deductible, period. That means you may need to pay out-of-pocket costs for the first 90 days of care instead of 30 days. In the meantime, you will offset that extra cost with a big savings on premiums. *Amey Stone*

What to Ask About a Policy

- What percentage of the daily benefit can be applied to home care?
- Does the plan cover unlicensed caregivers?
- How many years will the coverage last?
- Is there inflation protection?
- How many days of care must I pay for before the policy kicks in?

FUND WATC

■ **QUICK STUDY.** Trar
america has been in
mutual funds only th
years, but it's quickl
making a mark. Its I
mier Aggressive Gr
and Premier Small
Company funds finis
the 12 months ended
June 30 topping all U
general equity funds
with total returns of
77.1% and 76.1%, res
tively. Philip Treick
both, and he spoke w
BUSINESS WEEK's Ro
Barker:

Q: *What clicked for*
A: Amazon was a gig
win.
Q: *It's now about $108.*
was your average cost
A: Around $18.
Q: *Is it still a buy?*
A: On a long-term basis, absolutely. On a short-term basis, it's rich.
Q: *To get such a ride out of one stock, you must not hold that m*
in the portfolio. Wha
typical?
A: There are 27, 28 names in there now.
Q: *What's your bigge*
holding?
A: Dell Computer.
Q: *What else worked*
you?
A: Pixar [the comput
animation outfit] was
big winner. Disney is
starting up their pre
keting campaign for
Bug's Life [which Pix
working on]... a mov
that won't be release
til November.
Q: *What else do you*
now?
A: Sodexho Marriott.
a food-service, buildi
maintenance compan
They play the outsou
trend.

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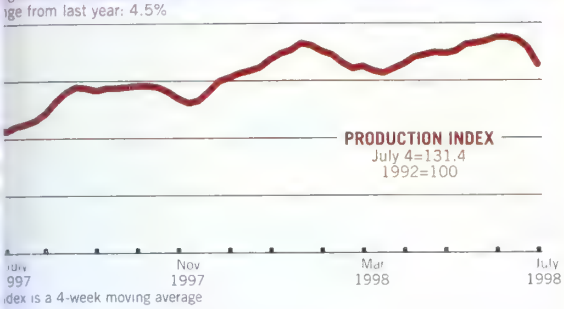
htm or AOL, keyword: BW

siness Week Index

UCTION INDEX

ge from last week 1.1%
ge from last year: 4.5%



Nov 1997 | Mar 1998 | July 1998

dex is a 4-week moving average

duction index was down for the week ended July 4. The unaveraged ll 1.5%, to 129, from 131.1. After seasonal adjustment, auto and oduction declined as the General Motors strike moved into its sixth /ith 22 assembly plants either completely or partially closed, GM's lost production hit 93,500 vehicles last week. The July 4 holiday ted to the declines in coal, lumber, electricity, and rail-freight traffic. ion of steel and crude oil posted sharp increases.

[illegible] 1998 by The McGraw-Hill Companies

ING INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
PRICES (7/10) S&P 500	1164.33	1146.42	27.4
RATE BOND YIELD, Aaa (7/10)	6.49%	6.51%	-9.7
SUPPLY, M2 (6/29) billions	$4,193.4	$4,195.4r	7.0
, CLAIMS, UNEMPLOYMENT (7/4) thous	392	393r	5.1
AGE APPLICATIONS, PURCHASE (7/10)	262.5	286.4	23.3
AGE APPLICATIONS, REFINANCE (7/10)	1,305.5	1,470.6	162.5

s: Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage Assn. (Index: March 16, 1990=100)

REST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
IL FUNDS (7/14)	5.45%	5.46%	5.47%
RCIAL PAPER (7/14) 3-month	5.49	5.50	5.57
ICATES OF DEPOSIT (7/15) 3-month	5.59	5.58	5.60
MORTGAGE (7/10) 30-year	7.03	7.08	7.67
TABLE MORTGAGE (7/10) one-year	5.78	5.81	5.78
(7/10)	8.50	8.50	8.50

: Federal Reserve, HSH Associates, Bloomberg Financial Markets

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (7/11) thous. of net tons	2,010	1,968#	-2.4
AUTOS (7/11) units	37,029	7,523r#	5.9
TRUCKS (7/11) units	25,560	25,510r#	84.1
ELECTRIC POWER (7/11) millions of kilowatt-hrs.	73,856	72,841#	6.3
CRUDE-OIL REFINING (7/11) thous. of bbl./day	15,601	15,274#	4.6
COAL (7/4) thous. of net tons	18,122#	21,041	4.7
LUMBER (7/4) millions of ft.	391.3#	485.5	11.9
RAIL FREIGHT (7/4) billions of ton-miles	23.5#	26.9	1.3

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPA1, SFPA2, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (7/15) $/troy oz.	293.150	292.000	-8.2
STEEL SCRAP (7/14) #1 heavy, $/ton	130.50	135.50	-9.1
COPPER (7/10) ¢/lb.	75.4	76.4	-32.1
ALUMINUM (7/10) ¢/lb.	62.0	63.0	-17.3
COTTON (7/11) strict low middling 1-1/16 in., ¢/lb.	77.01	77.09	8.7
OIL (7/14) $/bbl.	14.43	13.53	-25.7
CRB FOODSTUFFS (7/14) 1967=100	227.69	235.21	-5.0
CRB RAW INDUSTRIALS (7/14) 1967=100	294.45	294.53	-11.5

Sources: London Wednesday final setting, Chicago market *Metals Week* Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (7/15)	140.67	139.45	116.10
GERMAN MARK (7/15)	1.80	1.82	1.80
BRITISH POUND (7/15)	1.63	1.64	1.67
FRENCH FRANC (7/15)	6.04	6.09	6.07
ITALIAN LIRA (7/15)	1776.2	1790.5	1745.8
CANADIAN DOLLAR (7/15)	1.49	1.47	1.37
MEXICAN PESO (7/15)	8.850	8.920	7.916
TRADE-WEIGHTED DOLLAR INDEX (7/15)	114.0	113.9	104.9

Sources: Major New York banks Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

ata in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense nt. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

HE WEEK AHEAD

IG STARTS

, July 21, 8:30 a.m.EDT ▶ Housing robably totaled an annual rate of illion in June, slightly higher than 3 million pace in May. That's the forecast of economists surveyed by d & Poor's MMS, a unit of The -Hill Companies. Starts have for three months in a row, but the mains high by historical standards. rtgage rates and strong financial entals lifted home buying to record his spring.

REY-HAWKINS TESTIMONY

, July 21, 10 a.m.EDT ▶ Federal Chairman Alan Greenspan will appear before the Senate Banking Committee to deliver his semiannual testimony on monetary policy and the outlooks for economic growth, inflation, unemployment, and the money supply. He will repeat his testimony before the House on Thursday, July 23. Monetary policy has been on hold since March, 1997. The Fed's policymaking committee meets next on Aug. 18.

TREASURY BUDGET

Wednesday, July 22, 2 p.m.EDT ▶ The S&P MMS forecast expects that the U.S. Treasury will report a budget surplus of $50 billion for June, a little lower than the $54.6 billion reported in June, 1997. Washington remains on track to post a budget surplus for fiscal 1998, which ends in September. The Congressional Budget Office has said that the black ink could total near the high end of its forecast range of $43 billion to $63 billion. Members of Congress, however, have complained that the CBO's projections are too conservative.

UNEMPLOYMENT CLAIMS

Thursday, July 23, 8:30 a.m.EDT ▶ Initial claims for state unemployment benefits will probably add up to about 350,000 for the week ended July 18. Claims have shot up as a result of the strike at General Motors Corp. Filings totaled more than 390,000 for the weeks of June 27 and July 4, the highest readings in more than two years.

This Week, Online

Business Week presents frequent live conferences and chats on America Online–your opportunity to ask questions about timely topics.

BusinessWeek ONLINE

Sunday

Need capital for your small business? The SBA's Terry Bibbens talks about the agency's Web site that matches entrepreneurs with prospective investors. **July 19 9 p.m. EDT**

Tuesday

Telecom is the next hot stock sector in the BW-S&P market chat series, and S&P analyst Aydin Tuncer will be your guide. **July 21 4:30 p.m. EDT**

Thursday

Andrew Pilara of Robertson Stephens answers your questions on finding values in today's market and on his strategies for the funds he manages. **July 23 9 p.m. EDT**

AOL keyword: BW Talk

Transcripts of all conferences are available for downloading from the BW Online area on AOL soon after each event.

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AMERICA Online

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vestment Figures of the Week

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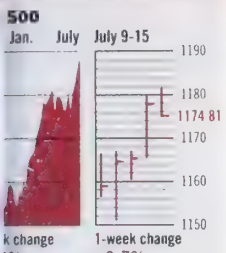


ENTARY

amy summer rally for . Some better-than-ex- l earnings reports and ıed good news on the in- front sent Wall Street to eights. On July 14, the ained 149 points to set a :cord of 9245.5. The S&P lso made a new high, 5. Both gave up some on July 15, but fueled by g tech stocks, the NASDAQ ıed Composite kept climb- ıd set six record highs in Overseas, the IMF reached agreement with Moscow, ussian stocks soared, up 0% for the week.

U.S. MARKETS	Latest	% change Week	Year
Dow Jones Industrials	9234.5	0.6	14.9
NASDAQ Combined Composite	1994.5	3.1	26.2
S&P MidCap 400	372.2	0.7	21.4
S&P SmallCap 600	194.3	0.3	14.9
S&P SuperComposite 1500	249.6	1.3	24.6

SECTORS	Latest	% change Week	Year
Bloomberg Information Age	373.5	4.1	25.6
S&P Financials	145.7	0.0	38.4
S&P Utilities	243.1	–0.9	20.4
PSE Technology	364.5	2.4	12.8

FOREIGN MARKETS	Latest	% change Week	Year
London (FT-SE 100)	6151.5	2.4	23.9
Frankfurt (DAX)	6108.2	1.6	45.4
Tokyo (NIKKEI 225)	16,614.1	0.5	–18.4
Hong Kong (Hang Seng)	8456.2	–2.0	–45.3
Toronto (TSE 300)	7388.1	–0.8	9.5
Mexico City (IPC)	4593.8	0.4	–4.0

FUNDAMENTALS	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.32%	1.36%	1.62%
S&P 500 P/E Ratio (Last 12 mos.)	27.8	27.6	23.5
S&P 500 P/E Ratio (Next 12 mos.)*	22.7	22.1	18.8
First Call Earnings Surprise*	2.40%	7.50%	1.87%

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 200-day average	1033.6	1027.0	Positive
Stocks above 200-day average	50.0%	51.0%	Neutral
Options: Put/call ratio	0.45	0.49	Negative
Insiders: Vickers Sell/buy ratio	1.65	1.99	Positive

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS	Last month %		Last 12 months %
Broadcasting	27.5	Specialty Appar. Retailers	106.7
Homebuilding	26.6	Broadcasting	104.1
Computer Software	24.2	Homebuilding	88.7
Semiconductors	22.4	Airlines	76.4
Pollution Control	21.6	Entertainment	74.0

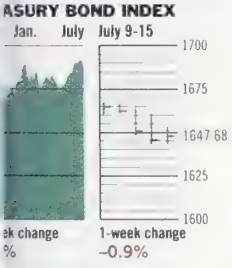
WORST-PERFORMING GROUPS	Last month %		Last 12 months %
Machine Tools	–12.8	Metals	–43.8
Engineering & Constr.	–8.7	Oil & Gas Drilling	–38.3
Leisure Time	–6.2	Engineering & Constr.	–29.5
Paper Containers	–6.0	Gold Mining	–25.1
Hotels & Motels	–4.8	Leisure Time	–23.5

BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness	Price	1-month change
Ascend Communications	49 9/16	– 3/16
AT&T	57 1/2	–2 13/16
BellSouth	66 3/4	–1 3/16
Bell Atlantic	45 15/16	–1 9/16
GTE	56 11/16	– 13/16
PepsiCo	39 1/4	–1 15/16

Decline ahead? Stocks with most significant selling on price strength	Price	1-month change
Microsoft	116 1/2	30 9/16
WorldCom	52 3/4	9 5/8
Cisco Systems	94 7/8	16 5/8
Dell Computer	107 3/8	27 1/8
Qwest Communications Intl.	39 11/32	11 15/32
Applied Materials	28 1/2	1 5/16

REST RATES



oomberg Financial Markets

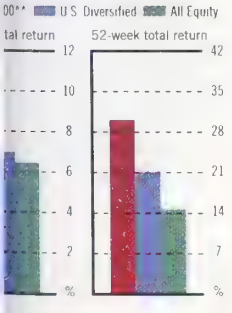
KEY RATES	Latest week%	Week ago%	Year ago%
MONEY MARKET FUNDS	5.10	5.11	5.16
90-DAY TREASURY BILLS	5.12	5.14	5.17
6-MONTH BANK CDS	5.04	5.03	5.18
1-YEAR TREASURY BILLS	5.31	5.35	5.51
10-YEAR TREASURY NOTES	5.48	5.48	6.20
30-YEAR TREASURY BONDS	5.70	5.70	6.48
LONG-TERM AA INDUSTRIALS	6.32	6.34	6.94
LONG-TERM BBB INDUSTRIALS	6.78	6.80	7.32
LONG-TERM AA TELEPHONES	6.71	6.73	7.18

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond		30-yr. bond	
	Latest week	Last week	Latest week	Last week
GENERAL OBLIGATIONS	4.43%	4.39%	4.98%	4.93%
PERCENT OF TREASURIES	80.89	80.95	87.34	87.70
TAXABLE EQUIVALENT	6.42	6.36	7.22	7.14
INSURED REVENUE BONDS	4.58	4.56	5.18	5.16
PERCENT OF TREASURIES	83.63	84.08	90.85	91.79
TAXABLE EQUIVALENT	6.64	6.61	7.51	7.48

UAL FUNDS



orningstar, Inc.

EQUITY FUNDS

Leaders Four-week total return	%	Laggards Four-week total return	%
ProFunds UltraOTC Investor	36.5	Potomac OTC/Short	–15.5
Matthews Korea I	25.7	ProFunds UltraBear Serv.	–14.2
Potomac OTC Plus	21.9	Prudent Bear	–10.2
Amerindo Technology D	20.0	Lighthouse Contrarian	–10.0
American Heritage	19.8	Fidelity Sel. Energy Serv.	–7.4

Leaders 52-week total return	%	Laggards 52-week total return	%
Transamerica Prem. Sm. Co.	71.2	Matthews Korea I	–66.3
Transamerica Prem. Aggr. Gr.	68.2	Lex. Crosby Sm. Cap Asia	–66.0
Weitz Hickory	66.7	Guinness Flgt. Asia Sm. Cap	–64.3
Fidelity Select Brokerage	64.8	Montgomery Emerg. Asia R	–64.2
Fidelity Select Leisure	56.2	Morg. Stan. Inst. Asia Eq. A	–62.5

EQUITY FUND CATEGORIES

Leaders Four-week total return	%	Laggards Four-week total return	%
Communications	11.9	Natural Resources	0.2
Latin America	11.7	Utilities	3.0
Large-cap Growth	11.2	Small-cap Value	3.3
Technology	11.2	International Hybrid	3.4
Financial	10.0	Precious Metals	3.9

Leaders 52-week total return	%	Laggards 52-week total return	%
Communications	37.7	Pacific/Asia ex-Japan	–53.0
Financial	37.2	Diversified Pacific/Asia	–40.4
Large-cap Growth	30.4	Diversified Emerging Mkts.	–31.1
Europe	29.8	Precious Metals	–29.9
Large-cap Blend	25.6	Japan	–25.2

re as of market close Wednesday, July 15, 1998, unless otherwise indicated. Industry clude S&P 500 companies only. Fundamentals, technical indicators, Bloomberg money flow analysis, and mutual fund returns are as of July 14. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

JAPAN'S VOTE OF NO CONFIDENCE

At last, voters are demanding changes in Japan's archaic system of government. The patterns in the recent Upper House election reveal the real reason, and they provide long-term hope that Japan's decade of decline can be reversed.

A crucial new factor in the election was widespread unemployment. If conventional wisdom is to be believed, consumer affluence and voter complacency have been behind Tokyo's policy paralysis during eight years of stagnation. That's clearly not true now. For the first time since the end of the war, the Japanese have serious unemployment, and that pain was reflected in the voting. The ruling Liberal Democratic Party (LDP) did not win a single district in the big cities—including Tokyo, Osaka, Kobe, and Nagoya. Urban areas, of course, are precisely where industry is concentrated and where unemployment is rising, in some places rather sharply.

The unemployment rate for May was 4.1%, nearly twice as much as two years ago. But for men under 25, the rate was 8.4%, indicating that few companies are taking on fresh workers. The official number of unemployed, 2.9 million, does not count a sizable hidden unemployment. Nearly 1 million people have been laid off, but they are not counted as unemployed: Instead, they are officially categorized as "resting" from work until rehired. But that won't come anytime soon. There are another half-million workers who worked less than 15 hours in May but who also were counted as fully employed. Truth is, the real unemployment rate for Japan is well over 5% and may be closer to 6% or 7%. Credit-starved small businesses aren't hiring, and large companies are encouraging middle-aged executives to take early retire

This new economic pain is beginning to frighten ord people, who turned out in large numbers to register protest against the LDP. In the previous Upper House tion, only 44% of the election bothered to go to the polls time, the turnout was nearly 60%. In the popular vote gave some 22% to the new opposition group, the Demo Party, and 25% to the LDP. The Democratic Party is l Naoto Kan, a former Minister for Health & Welfare blew the whistle on a government scandal caused by tainted blood for transfusions. Kan wants to roll back l Minister Ryutaro Hashimoto's rise in the sales tax and permanent tax cuts to boost demand. Both are good id

The election results show that the LDP is caught downward spiral. It has deliberately used taxpayer mon finance a rural electoral strategy that is now failing. It taxes that fell heavily on city dwellers and urban empl and spent the money on construction companies and fa cooperatives in exchange for rural votes. When Japan's omy was healthy, it worked. Now, it doesn't.

It would be a tragedy if Japan's political system rec unemployment to soar to 10% before finding the coura restructure the economy. Japanese voters are sending a signal. They are unhappy with the LDP's economic ste ship. They want action. Voices elsewhere in Asia a America have been urging Japan to take the hard mea to restart growth. Finally, a strong internal voice is jo the chorus. The LDP should heed it.

THAT SURPRISINGLY LOW INFLATION RATE

How far can inflation drop? The latest batch of figures on the U.S. consumer price index shows an amazing lack of price pressure. The CPI rose just 0.1% in June. For the first six months of 1998, it's running at an annual rate of 1.4%, down from 1.9% in the last six months of 1997. With unemployment at 4.5%, this is truly remarkable, particularly since most economists agree that the official CPI overstates the true inflation rate by at least half a percentage point.

The big surprise in the numbers is in services. By now, it is clear that manufacturing is being hammered by the Asian implosion and that many goods prices are weak and falling. Ditto for commodities. Without strong Asian demand, energy prices are tanking. But services were supposed to be different. Divorced from global competition, and inured to the decline in Pacific Rim demand, service industries were said to have that rare attribute, pricing power. Well, maybe not.

The recent numbers show that housing inflation has been essentially flat over the last year. The key category of rents and rent equivalents shows no acceleration from the last six months of 1997 to the first six months of 1998. Indeed, core service inflation as a whole barely budged during this time, goingf a 2.9% rate to a 3.1% rate. Given the strength of the ho market, this is counterintuitive. One explanation may b housing inflation is limited to the top tier of the market

There are other surprises. Prices for such services surance and legal advice are not going up much, either A category, they rose at a rate of 2.6% in the first six mon 1998, down from 4.7% in the last six months of 1997. Pr hospital services rose 2.8%, down from 3.3% (although d fees did rise sharply). These are services that do not ha rect international competition and should be rising sh But they are not. The service sector may be more intim tied to the global economy than economists believe. service sector prices in June may be reflecting a second effect of the Asian crisis.

If you take out surging tobacco and drug prices, the in rate for the U.S. continues to be surprisingly low. At lon price stability may be at hand. That's the good news. bad news is that anything lower means the economy co ter a deflationary zone. How low is inflation supposed t

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BusinessWeek

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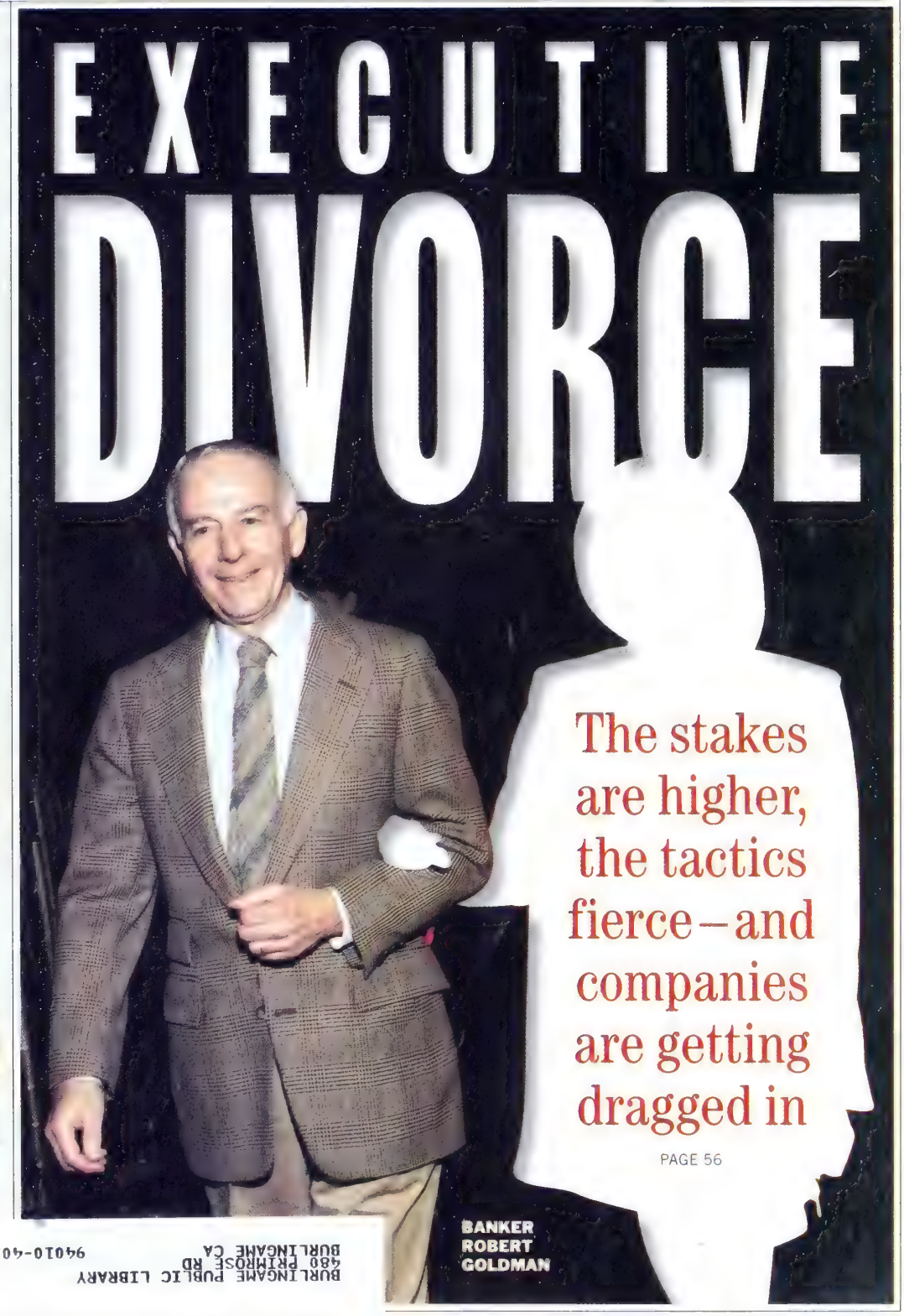
EXECUTIVE DIVORCE



The stakes are higher, the tactics fierce—and companies are getting dragged in

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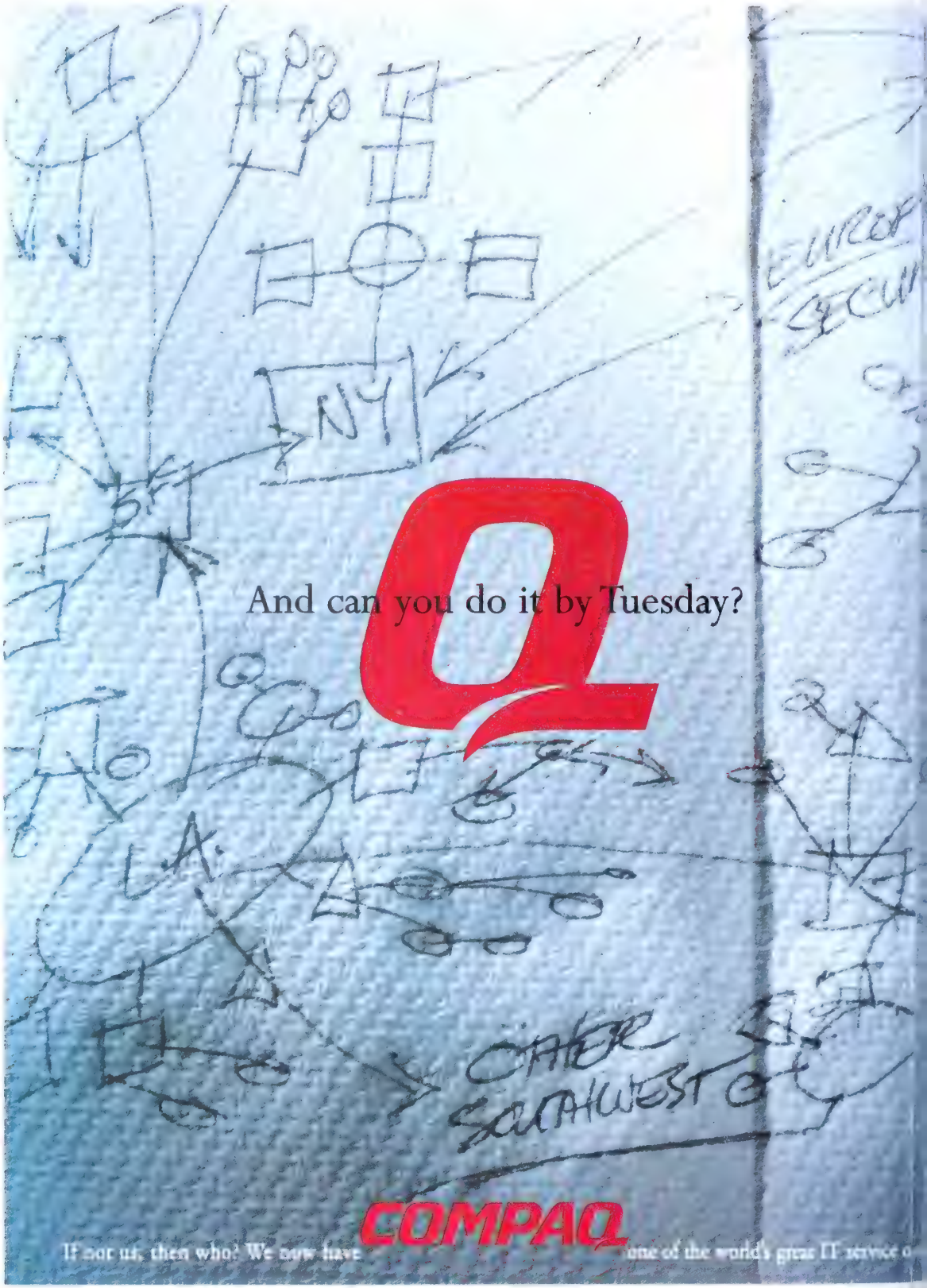
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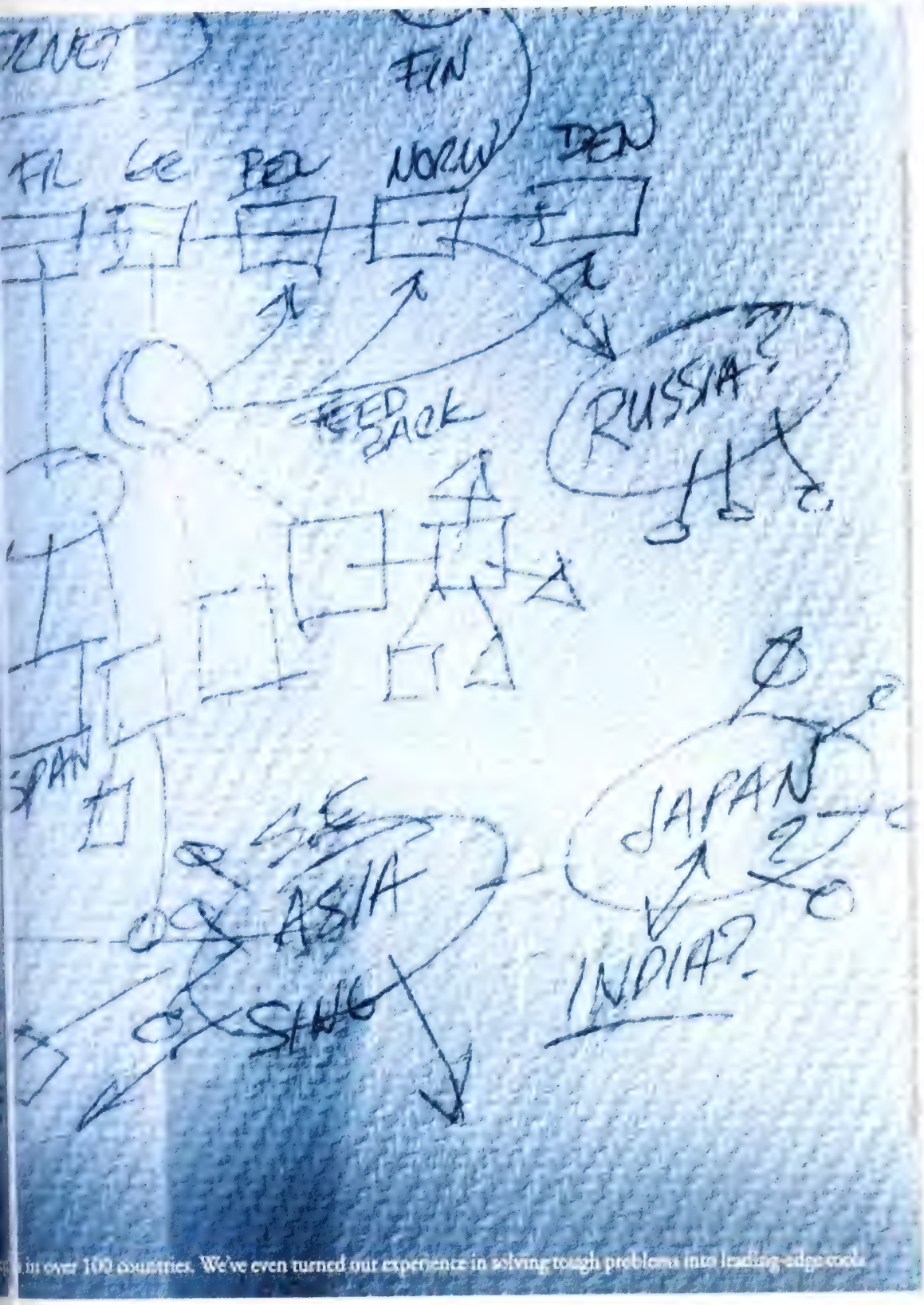

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BusinessWeek
AUGUST 3, 1998

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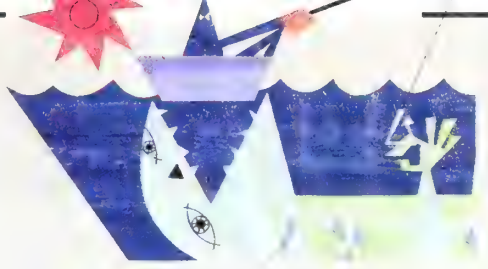

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Up Front

EDITED BY ROBERT McNATT

YALE: *Diversity in all things*

REALITY BYTES

COME BACK, MAC. ALL IS FORGIVEN

THE MAC IS BACK. A YEAR after Yale University urged incoming students not to buy Macintosh computers, the Ivy League school has changed its mind.

Bowing to campuswide sentiment—especially from faculty members with long histories of using Macs—Yale has quit bad-mouthing the Apple Computer machines. The university is now officially neutral in the war between Wintel and Macintosh. "This year, there is no recommendation," says Yale spokesman Tom Conroy.

Yale's thousands of Mac devotees consider that a victory. Last year, the school's Information Technology Services group warned of "uncertainties about the availability of software" for the Mac, adding that it couldn't guarantee support for the platform beyond June, 2000.

But in the intervening year, Mac lovers began rallying against the school's Windows-centric majority and Apple announced its iMac PC, which it hopes will make inroads in educational markets. Also, Apple is now making money, allaying survival fears. Says Philip Rubin, a former director of the Mac user's group at Yale, "the market has changed in the last year, and there's more confidence in the Mac." *Dennis Berman*

GREEN STREETS

ALL CHARGED UP AT UPS

ELECTRIC VEHICLES HAVE been a great idea with a nagging problem: They're not the Energizer Bunny. Now, UPS has one it hopes will keep going and going.

Environmentalists will keep a keen eye on tests of the new Hybrid Electric Vehicle, or HEV, that United Parcel Service will begin evaluating this summer. Developed by Navistar International Transportation and Lockheed Martin, the HEV—to be tested in three cities, starting with Johnson City, N. Y.—could prove a boon for truckers if it pans out. The HEV has a conventional diesel engine with an unconventional generator that powers 23 batteries and an electric drive motor. It's a technology that differs from that used in Toyota's current hybrid cars. The HEV can recapture some energy every time the brakes are used, which precludes the need to recharge the batteries, a drawback of most electric vehicles. That means driving farther on less fuel.

OLD TECH: *Clean someday?*

But lawyer Richard Kassel of the Natural Resources Defense Council cautions that "nobody has actually operated any of these vehicles in the real world." *Joan Oleck*

TALK SHOW "By giving to the earth the remains of the murdered innocents, we want to atone for the sins of our forebears."

— Boris Yeltsin, at the burial of Czar Nicholas II and family

LITIGATION NATION

NIPPING FUTURE NAFTAS IN THE BUD

BY SUING THE GOVERNMENT to overturn NAFTA, the United Steelworkers may well have dimmed the prospects for future U. S. trade pacts.

The USW, supported by Harvard University law professor Laurence Tribe, is suing Uncle Sam in an Alabama federal court over the validity of the 1994 pact. The union calls NAFTA a treaty—not a trade agreement—which requires a two-thirds vote of the Senate, according to the Constitution. Since NAFTA passed with a simple majority, the s claims it should be resci "If NAFTA isn't a treat hard to imagine what v be," says Tribe, who ha pressed disfavor over trade agreements.

TRIBE: *Treaty?*

He concedes that ev the USW win suit, a judge ma rescind NAFTA. White House lieves it will But if the c give the case credence at a could make it difficult for the ton Administr to push for a pansion of NAF Latin America or "fast-track" trade negot authority that detour Hill. *Aaron Ber*

THE FUND FRONT

IS THIS FUND FAMILY STILL DYSFUNCTION

THE RODNEY DANGERFIELD OF mutual-fund families, the Steadman Funds, is looking to get some respect. Steadman Security Trust, Steadman Investment, and Steadman American Industry have long been among the industry's worst-performing funds. They were so bad, in fact, that Steadman cut off new investors in 1988, under pressure from the Securities & Exchange Commission.

But after outpacing the Standard & Poor's 500-stock index in the first half of 1998, Steadman may ask the SEC to reopen the funds after its trustees' meeting in early fall. Says President Max Katcher: "The only way the funds can survive is to open new investment."

Katcher began man the funds after fo Charles Steadman die December. New inv could help cut bloated expenses of about 17% equity fund norm is Overhead has eaten turns as investors cash over the years, shrinki sets to $7.4 million. B good quarters do not a fund make, says Morni analyst Russel Kinnel, cially with expenses t fectively gouge shareh "There are thousands o out there," he says. "W the one that has the le spect for shareholders?

THE STEADMAN STORY

FUND	6 MOS	12 MOS	5 Y
AMERICAN INDUSTRY	21.13%	19.44%	-10.0%
INVESTMENT	25.84%	31.76%	-4.7%
SECURITY TRUST	24.32%	19.48%	2.9%
S&P 500	17.70%	30.15%	23.0%

Total returns through 6/30/98; 5-year annualized rate

Data: Mornings

STANDARD
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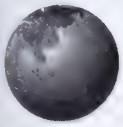
DRI

Will Your Business Survive Asia's Economic Implosion?



A Standard & Poor's DRI study assessing the implications of a worst-case scenario

Despite recent attempts to stabilize the yen, the risks of an Asian economic implosion continue to climb. With this economic news, the outlook for your revenues and profitability has deteriorated.

A deeper recession across Asia combined with a financial meltdown in Japan could spell serious trouble for the world economy, including recessions in the U.S. and Europe, a sharp correction in the U.S. and European stock markets, a further free-fall of the yen, devaluation of the Chinese renminbi, and the spread of the Asian flu to other emerging markets, including Mexico, Brazil, Russia, Turkey and South Africa.

Even as conditions continue to deteriorate, U.S. and European businesses have yet to experience the full impact of this crisis. But prudent managers know that standing above the rest in today's global marketplace requires interpreting, anticipating and — most of all — responding to sometimes ambiguous changes in the global financial and economic climate.

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Up Front

SHOWBIZ

KIM SAYS: 'LET MY ELEPHANTS GO!'

BIG STARS: *Basinger and friend*

FELD ENTERTAINMENT, OWNER of Ringling Bros., Barnum & Bailey, could face the end of the circus as we know it. Actress Kim Basinger, a spokeswoman for the Performing Animal Welfare Society (PAWS), is campaigning to keep circuses from using elephants, which it claims are subject to abuse.

"It's mind-boggling and scary to think what human beings are capable of doing with animals for a profit," the star of *L. A. Confidential* told BUSINESS WEEK. "We don't need elephants in circuses. We don't need any animals in circuses, and we don't need to call this entertainment."

But a circus isn't a circus without elephants, says Barbara Pflughaupt, spokeswoman for Feld, a privately held business with estimated 1997 revenues of $550 million—and 40 elephants. "Asian elephants are a part of us and of what we are. It would be counterproductive to do anything other than treat them well."

PAWS hopes that Congressman Sam Farr (D-Calif.), a supporter, will push the feds to better enforce the Animal Welfare Act, protecting elephants and other circus animals. Basinger hopes for even more. "Free the elephants," she says, "and the rest will follow." *Tammy Reiss*

MARKET MADNESS

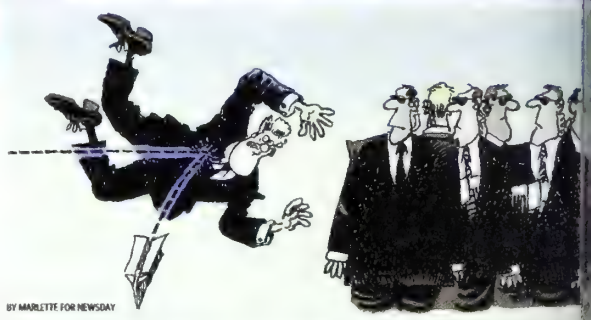
A STRATEGY JEANE DIXON COULD LOVE

MAYBE IT'S A SIGN THAT THE stock market is ready to enter a black hole. Software using astrology to guide investment decisions was a big hit at the mid-July convention of the American Federation of Astrologers (AFA) in Orlando. Yes, that's where Disney World is. But these folks swear they're not in some fantasyland.

"This stuff works," boasts astrologer Alphee Laudie of West Hartford, Conn., whose $1,349 software package, Financial Trader for Windows, uses the stars to guide stock trades. Tracking, say, Apple Computer in terms of the transit of Uranus, may sound like gibberish—but Laudie says he gets $250 an hour to consult on trades. "It is a magnificent suite of financial astrology tools," gushes Florida financial consultant Tim Bost.

At the start of the '90s bull market, there weren't any such programs, say the stargazers. Now, with the Age of Aquarius nearing, there are at least eight, with more on the way. AFA members say business types of all sorts are increasingly using astrological charts and software. Meanwhile, astrologers foresee healthy returns for their customers and for themselves. *Dennis Blank*

DRAWN & QUARTERED



THE PRESIDENT BRAVELY HURLS HIMSELF INTO THE LINE OF FIRE OF ASSASSIN'S SUBPOENA TAKING ONE FOR THE SECRET SERVICE

FUND WATCH

A GREEN FLAG FOR INVESTORS?

AND YOU THOUGHT 9,000 mutual funds were enough. Well, not so fast—there's a group in Charlotte, N. C., that is revving up to open the StockCar Stocks Index Fund. That's right, a no-load mutual fund that invests in companies either profiting from or sponsors of NASCAR—the National Association for Stock Car Auto Racing.

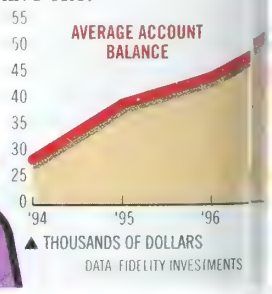
John Allen II, whose StockCar Stocks Advisors organized the fund—now in registration with the Securities & Exchange Commission—will invest in about 50 stocks. Among them: NASCAR sponsors such as Procter & Gamble, McDonald's, and General Motors, plus purer plays such as International Spee[dway], which owns the famed [track] at Daytona, Fla. From[...] through 1997, Sto[ck] would have just outpace[d] Standard & Poor's 500 [index], with total retu[rn] 250.7%, vs. 242.6%.

But Allen and pa[rt] aren't at the pole po[sition]. The Motorsports Asso[ciation] Growth & Income Fu[nd], 5.75%-load[ed] ing based in Green[sboro], N. C., roared off on Ju[ly] Through July 15, it has[gone] down 4.4%. Two n[ew] funds in the same n[iche] niche? "Maybe," quips [Morn]ingstar analyst Russe[l K]nel, "we need to start [a new] category." *Robert I[mp]*

THE BIG PICTURE

OH, HOW WE LOVE OUR 401(k)s

The average 401(k) account now tops $50,000, 19% r[ose] than in 1997 and 82% more than in 1994. Americans re[main] passionate about the 401(k): Fidelity says that 85% [of] clients' eligible employees have one.



FOOTNOTES Prospects considered "problem customers" by salespeople: nationwide, 17.4%; in New York City, 24.6%

DATA: *TOUGH CALLS*, BY JOSH GORDON (AMACOM PUBLISHI[NG])

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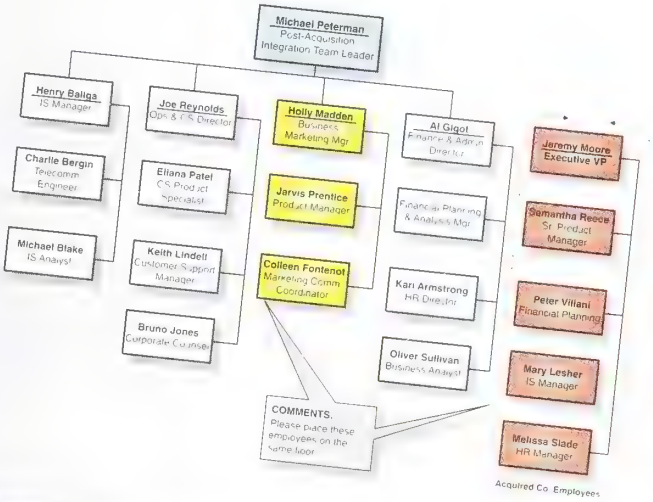
Memorandum

To: Chris Murphy, Facilities Manager
From: Mike Peterman, Post-Acquisition Team Leader
CC: Holly Madden, Jarvice Prentice, Colleen Fontenot; Jeremy Moore
Date: 07/27/98

Re: Acquisition Integration Plan

The following organizational chart shows how my new Post-Acquisition Team is structured. The acquired employees will be working closely with Holly's group. Please make sure there is space to keep the eight of them together on the same floor.

Thanks,
MP



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Readers Report

WHO SAYS MILTON FRIEDMAN WAS RIGHT?

In "Milton Friedman: Being right is the best revenge" (Economic Viewpoint, July 13), Robert Barro confuses being in fashion with being right. That the Republican leaders in Congress now spout Friedman's right-wing, antigovernment ideas doesn't make them correct.

In fact, time is proving Friedman wrong on most counts. The Fed, under the leadership of Friedman acolyte Alan Greenspan, has jettisoned all vestiges of money-targeting and now unabashedly pursues old-fashioned Keynesian interest-rate targeting (albeit with a non-Keynesian agenda). Emerging markets have fallen victim to a classic Keynesian financial panic and debt deflation. And our Friedmanians in government, so quick to praise free-market solutions at home, urge Japan to pass a Keynesian-style fiscal stimulus. We might be Friedmanians today, but when the Asian flu hits home a few months from now, we would do well to dust off the old Keynesian texts.

Ellen Frank
Brookline, Mass.

In declaring Milton Friedman's version of laissez-faire economics triumphant over Keynes's activism, Robert Barro's statement that "free-market theories rule the roost" is for the birds. It assumes that impersonal market forces set wages and prices. In fact, oligopolies pay artificial wages and salaries because they charge artificial prices (which they can do because capital requirements restrict the entry of competition, thus denying a prime requirement for the free market to prevail).

Artificial rewards, including 20-year retirement, explain why the "volunteer army has worked very well," although Barro attributes it to the free market. While Barro praises the earned-income tax credit as a "boon to the working poor," it is a direct government subsidy, as is true of school vouchers, of which he also approves. Barro embraces the privatization of Social Security, which would also amount to a sub[sidy] feeding profits to the securities ind[ustry] in exchange for insecurity for th[e] people who cannot afford to specul[ate] stocks.

Mack A. [illegible]
A[tlanta]

Like Barro, I have great respe[ct] Milton Friedman. I do fault Bar[ro] overlooking Friedman's role in bri[nging] monetarism into the Reagan [White] House, which led to the wrenchin[g] pression of the early 1980s. Rea[gan's] support of the monetarist's recom[men]dations encouraged Federal Re[serve] Chairman Paul Volcker to induc[e] astatingly high interest rates. [The] high rates resulted in record uner[ploy]ment and huge losses in agricultu[re] manufacturing. Much of the blam[e] at Friedman's door.

Newell D. Sa[ffer]
Olmsted Township

HEWLETT-PACKARD CAN NO LONGER AFFORD CONSENS[US]

The "HP way" is getting in th[e] ("Lew Platt's fix-it plan for He[wlett-]Packard," Information Technolog[y], 13). True innovation requires n[ew] ideas, and radical ideas can grow [only] a climate of constructive dispute[,] stands in diametrical oppositi[on] Hewlett-Packard Co.'s consens[us-]ented culture.

For HP's traditional markets, th[e] ture may have nurtured fine or[der]tional values. With the brutal cor[po]tization of technology in the In[ter]era, however, it has become a co[m]tive disadvantage. Fortunately, H[P] history of reinventing itself. I'm [op]tive this tradition will prevail at [HP]

Marc W. Fleisc[her]
Menlo Park

HOW BELL ATLANTIC FOSTERS COMPETITION

"At last, telecom unbound," [Cover] Story, July 6) offers an interesti[ng] incomplete account of the deal's [re]

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ECTIONS & CLARIFICATIONS

a home near the fifth hole isn't " (Cover Story, July 20) should have iat Tennessee and New Hampshire) state tax on earnings, Social Secu- efits, or pensions—public or private.

or consumers and the telecom- tions industry. The authors of l story appear to have bought from the long-distance compa- t it is the local phone companies e stifling innovation and compe- the local market.

act is that Bell Atlantic Corp. is ng the requirements of the munications Act to open its mar- competitors. Bell Atlantic sub- a draft of its long-distance filing New York State Public Service sion last year and recently re- favorable support from New ate Public Service Commission an John O'Mara and Justice ntitrust chief Joel I. Klein. The ison there is not more competi- he local market is that some of rest potential competitors, such and MCI, have taken a deliber- s at the local residential phone in an effort to keep Bell At- it of the long-distance market.

rding innovation, Bell Atlantic ng its customers into the 21st with state-of-the-art data solu- e're beginning construction on a neration long-distance data net- sing the latest technology to services such as virtual private s and audio and video streaming World Wide Web. Additionally, lantic's customers will soon be order "always-on" high-speed access. And Bell Atlantic's ISDN ed service digital network) is al- vailable to nearly 20 million lds in the region.

petition, innovation, and high- cess to the Internet are already he only thing standing in our egulatory approval to offer long- voice and data—not a merger.

Ivan G. Seidenberg
President & CEO
Bell Atlantic Corp.
New York

BULLYING ET IT EVERYWHERE

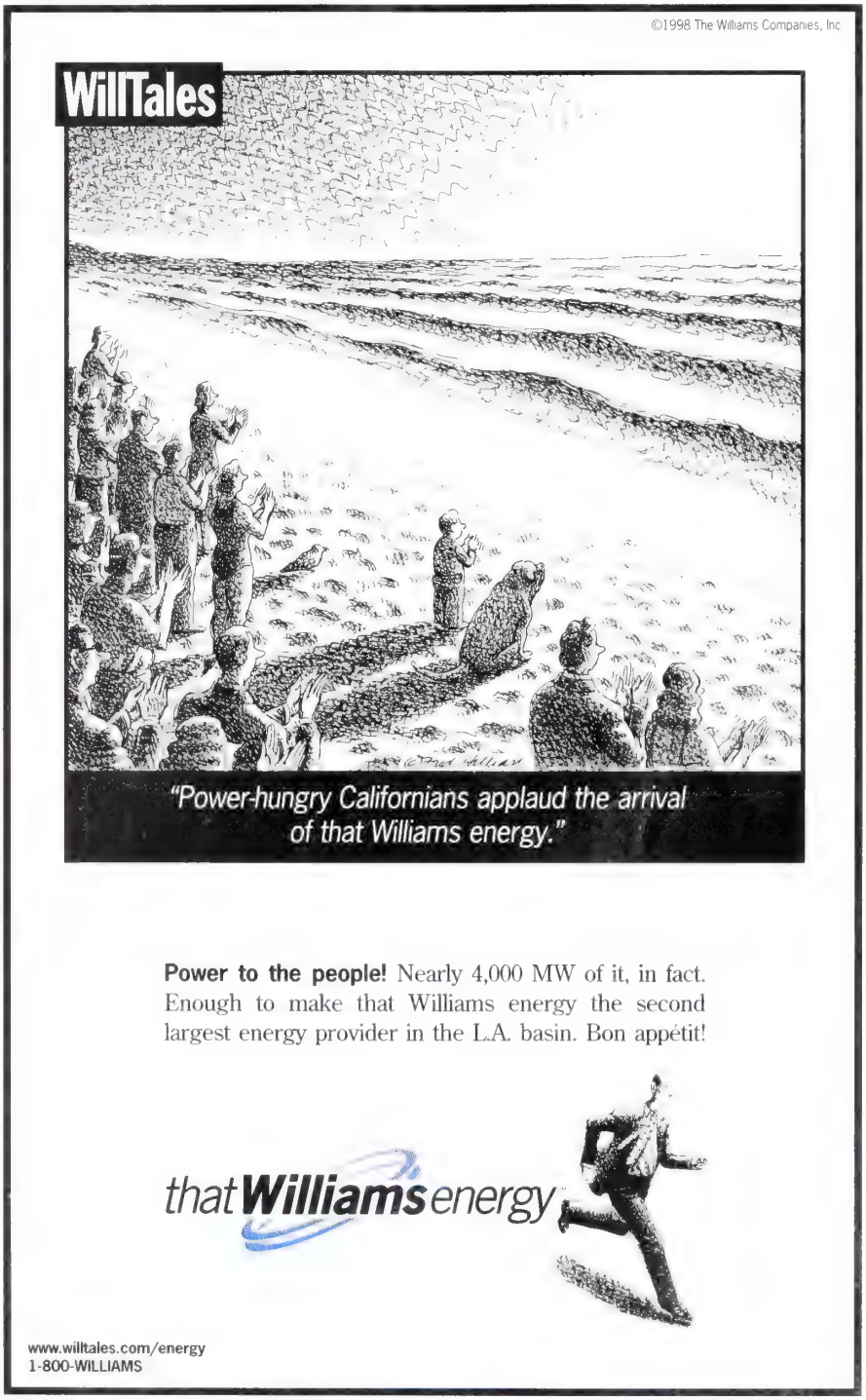
commentary on U.S.-China y is flawed ("The U.S. and Chi- for the follow-through," News: & Commentary, July 13). Com- China, barely 50 years old, with illion people, is still poor. More % of the population lives in the hinterlands. Per capita income is less than $1,000 a year. It's way off target to judge that China will be the U.S.'s main interlocutor in Asia in the 21st century.

"The interloper" would be more apt, as Beijing keeps trying to wrest as much profit as possible from the U.S., Japan, South Korea, Taiwan, and others—financially, diplomatically, and technologically. The Chinese are cunning negotiators, hanging tough until their counterparts become frustrated and cave in. U.S. statesmen and entrepreneurs: Watch out in the follow-through of the summit.

S. T. Tjia
Houston

SLOWLY BUT SURELY, JAPAN IS OPENING ITS MARKETS

Isn't it contradictory to show a photo of Merrill Lynch & Co. training Japanese staff for its retail operations in Japan, while blaming Japan for allowing



How Microsoft is using Clarify to get a clear view of its customer

Mark Perry, General Manager, Worldwide Support, Micros

Microsoft is the worldwide l
in software for personal com
Mark Perry's mission is ens
the long-term success of its
customer relationships.

"Our goals are straightforv
find out what our custome
need and make sure they'
successful. That's our nun
one priority. Clarify simp
the best solution to meet
business objectives. They r
that this would be a long-t
relationship, and worked
hard to make our project
success. Now we can see e
customer individually. Wi
Clarify we can tailor our
interactions to each custor
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aders Report

foreign investment ("Asia: One er," Editorials, July 13)? Merch is not an exception. In the veral years, Citicorp, General Capital Services, Toys 'R' Us, just to name a few, have made tial inroads into the Japanese Most of these are well accepted nese consumers and the busiunity.

ugh the shifts may seem less than the West expects, Japan ently achieved a great deal of in its economic policy. Our in- are less regulated now. The ment has committed a considern of public funds to resolve the crisis. What we should do is ler to explain to policymakers international media what we g to improve our economy.

Ken Miyao
Tokyo

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BURN RATE
How I Survived the Gold Rush Years on the Internet
By Michael Wolff
Simon & Schuster • 268pp • $25

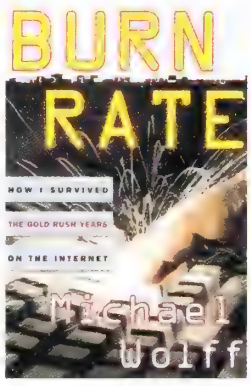
THE WILD AND WOOLLY TALE OF A NET STARTUP

Decades from now, we'll look back at the latter half of the '90s as the years when the Information Age was created. Like the Industrial Age, we'll note, it was built on the sweat and brainpower of the brightest minds of the time. But lest nostalgic souls attribute too much nobility to the cause, we now have what may be the first true chronicle of the times. Michael Wolff's *Burn Rate: How I Survived the Gold Rush Years on the Internet* pierces the hype to lay bare the forces driving the Internet frenzy. And they are not always pretty.

Burn Rate is a hilarious and frightening account of the life of an Internet startup. Wolff, a journalist who has written for *The New York Times* and other publications, started Wolff New Media LLC in the early 1990s. By 1994, he had stumbled on to the Internet—then just a geeky network used by comparatively few—and into the forefront of the digital revolution. His first Internet product, *NetGuide*, a book that reviewed resources and sites on the Net, was quickly followed by a series of expanded Internet guides and two Web sites. Overnight, his modest publishing venture became a hot property sought after by venture capitalists and investors.

From this vantage point, Wolff observes the exhilarating early days of the Net, a world where hype matters more than reality, buzz more than revenues, and where a mere idea can be dressed up and sold to eager investors, creating paper fortunes overnight. The book begins in 1996. Wolff is at an industry schmoozefest trying to drum up interest from investors and potential acquirers. He has hooked up with Robert Machinist, president of New York investment bank Patricof & Co. Machinist is hot to cash in on the company—he figures it's worth $60 million, maybe even $100 million. And when he tells Wolff that "our minimum goal is to get you out inside 18 months with $30 million," the entrepreneur begins to believe him.

No matter that Wolff New Media has slightly more than $1 million a year in revenues and losses of around $3 million. Or that, at the current "burn rate"—the amount of money consumed in excess of revenues generated—Wolff will run out of money in six weeks without fresh funding. The quest to feed the burn rate takes Wolff on a wild ride.



First, Machinist tries to combine Wolff New Media with Magellan, a West Coast search-engine company. The pitch: Wolff's content will keep people on Magellan's search site longer, generating more ad revenue. And the combined entities will make for a more powerful initial public offering. Magellan is far bigger than Wolff, but Machinist shrewdly manages to turn the deal into a merger of equals and then into a takeover of Magellan. Negotiations bog down, however, and the window for Internet IPOs slams shut. Magellan is eventually sold to Excite, a competing search-engine outfit.

For Wolff and his investors, it's on to Plan B, then C, then D. Wolff's narrative wanders, and the sequence of events is sometimes confusing. Eventually, he hits on the idea of producing a magazine version of *NetGuide*, sort of a *TV Guide* for the Internet. The only problem is, for all of the comparisons to TV, the Net is nothing like it. Fortunately for Wolff, most of his potential funders have never actually used the Net.

That includes executives at CMP, a publisher of computer trade magazines. Having just launched its Windows magazine, CMP is looking for the next big thing, and its brain trust is con the Internet is it. Wolff sells th *NetGuide* with canned tours of th "They had no real experience to the way of their enthusiasm," Wolff. "They seem to believe th have captured the Internet and it. And they want it."

Indeed, Wolff is stunned whe offers to buy *NetGuide*, then n more than a name, a concept, database of ephemeral Interne tent—"absolutely nothing. There really, no assets"—for a seven- sum. (After spending $15 million million to buy and develop the ve CMP would eventually kill the mag

As these charades play out, t vestors grow impatient. Despe needed money comes with strin tached: Wolff would be kicked board, and his main investor, Jon would become chief. Wolff narrow capes this trap and looks for new ners: Ameritech and Washingto Co. show interest, deals materialize.

Through Wolff's t insightful history of th mercialization of the I emerges—from the when media titans d "content is king" to th ization that the best h making money in th medium may lie in merce. We witness th of Louis Rossetto's magazine and get a p side the hallowed h Time Warner Inc., where Walter I and Bruce Judson cook up Path the high-profile Web site later du money-losing "black hole" by a Time Warner exec. And there's account of America Online Inc world's most dysfunctional compa

As the fantasy starts to unrave begins having some doubts about damental premise. "In some perfe we had invented this new pub medium, and no one reads [on the he muses. The new insight led return to his roots. The result *Rate*, is a fascinating cautionary t should be required reading for all be Net entrepreneurs.

BY AMY C

Cortese covers the Intern BUSINESS WEEK.

AT THE DAWN OF THE INFO AGE, HYPE AND BUZ COULD BE DRESSED UP AND SOLD FOR A FORTU

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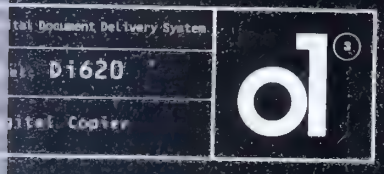

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HOT TYPE

IT'S A CAPTIVATING IDEA: WHY NOT TELL THE Microsoft Corp. story from the point of view of the developers who created the company's world-dominating software products? Unfortunately, *Barbarians Led by Bill Gates*, No. 6 on this month's hardcover best-seller list, lacks the insight of Tracy Kidder's classic account of technical creativity, *The Soul of a New Machine*. Instead, authors Jennifer Edstrom and Marlin Eller offer up a sneering diatribe against Chairman William H. Gates III—plus a backhanded defense of the company in the face of the Justice Dept.'s antitrust suit.

Their argument: Microsoft is too incompetent to be a threat to civilization. In his introduction, Eller, a former Microsoft developer, attributes the company's success to good rather than "Machiavellian brilliance," adding that life crosoft is "like a Dilbert cartoon."

To make his case, he and Edstrom (daughter of Gates lic-relations handler, Pam Edstrom) load the book with accounts of petty rivalries and plans gone awry. M this stuff is merely boring. What's mean is their moc Gates, who can't possibly be this stupid. They claim, stance, that he rejected Adobe Systems Inc.'s now-do PostScript technology for printing documents simply b it "didn't have the word quick in the name!" That's believe. And it shows why this book is hard to take.

BY STEVE

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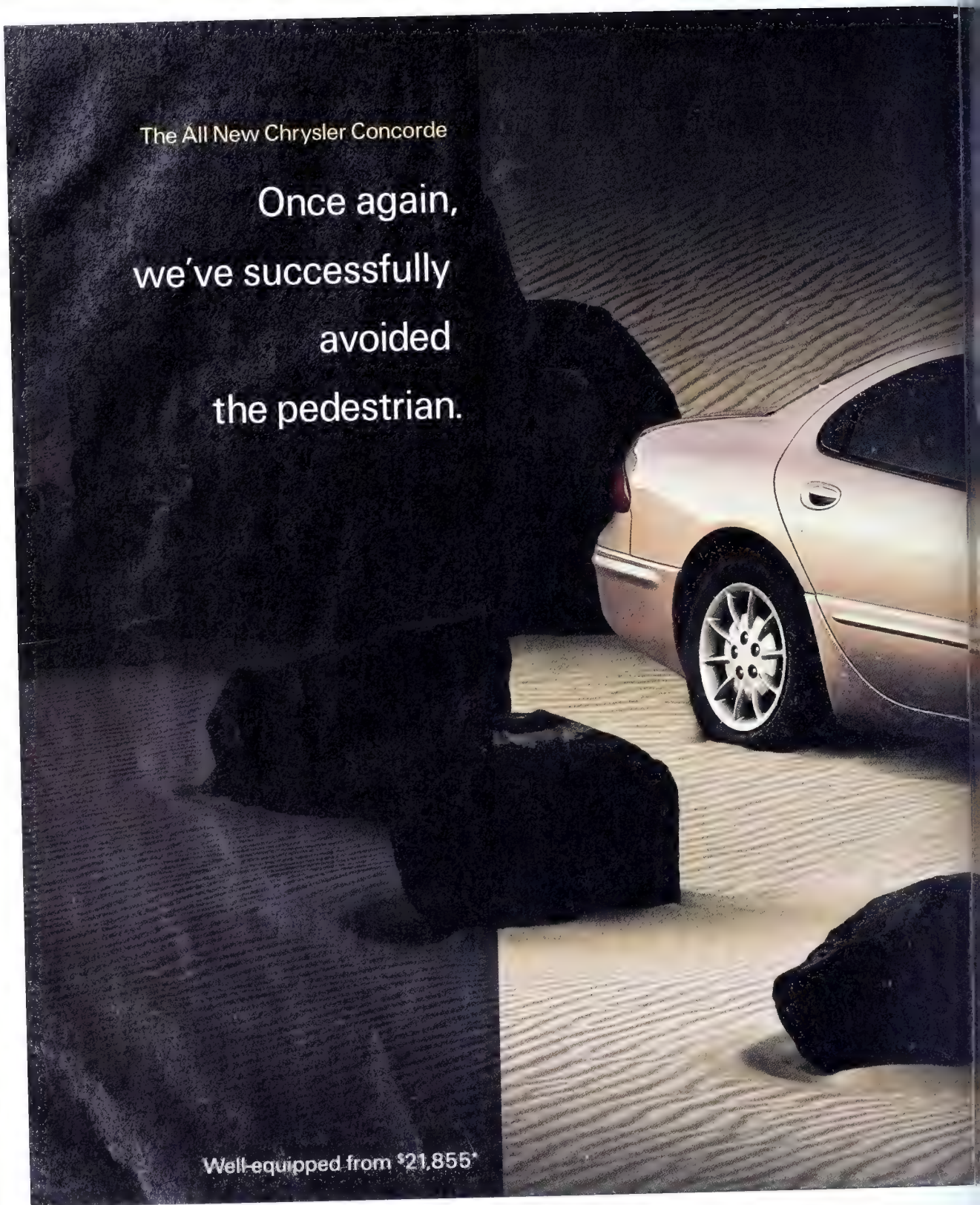
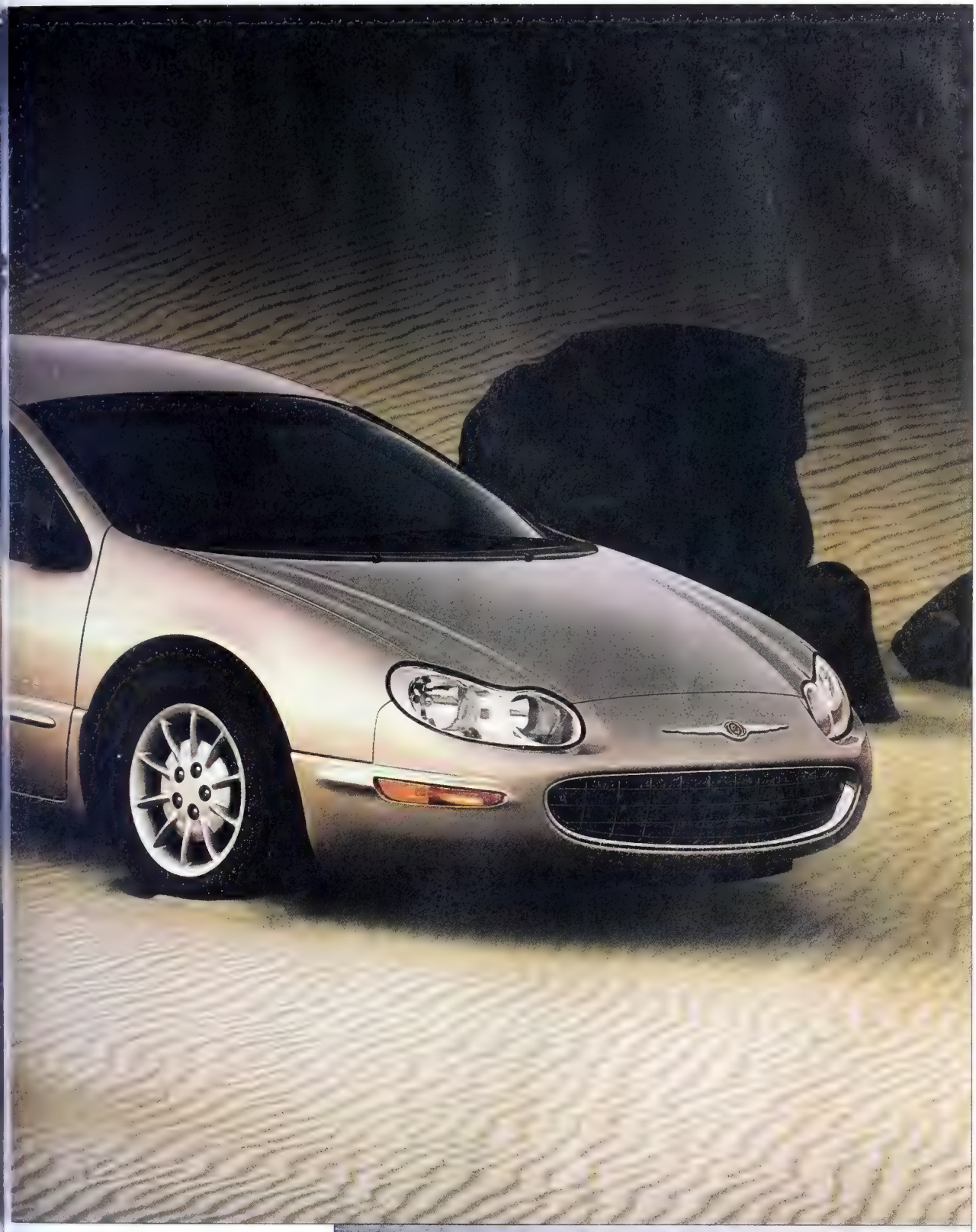


There are a lot of words that can be used to describe the all-new Chrysler Concorde. "Pedestrian" is definitely not one of them. Indeed, the new Concorde stands as an exhilarating testament of our engineers' relentless commitment to inspired engineering and design. To begin with, Concorde's eration, lighter-weight, all-aluminum engine not onl nearly 25 percent more horsepower but it also man 10 percent more fuel efficient.** What's more, combi

*Wheels shown, extra. **Comparison of 1997 MY 3.3 liter engine to 1998 MY 2.7 liter engine (LX model). 1998 MY EPA est. mpg (LX model): 21 city, 30 hwy.



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ENGINEERED TO BE GREAT CARS

BY STEPHEN H. WILDSTROM

A BARGAIN FOR THE COLLEGE-BOUND

Suitable PCs ought to cost no more than $1,500, and you may get away for less

It's the time of year when recent high school graduates are anxiously looking forward to college, while their parents get ready for tearful good-byes—and writing large checks. While the cost of higher education continues to soar, there's a tiny bit of good news: The cost of equipping your college-bound child with a computer is at an all-time low.

For most students, a personal computer is essential. While colleges provide computer clusters for student use, they can't offer the convenience of a personal machine. And with dorm rooms at many schools providing direct access to campus networks and the Internet, PCs have become a primary communications tool for course work and socializing.

CHAT TIME. Still, the computing needs of most students are relatively modest, with E-mail, chat, and word processing the dominant uses. While a state-of-the-art machine still costs more than $2,000, there's not much reason to spend more than $1,500, and it's possible to get away for less.

The slowest desktop computers on the market today use 233 MHz MMX Pentiums or their equivalent from Advanced Micro Devices or Cyrix. When backed by at least 32 megabytes of memory, these are plenty fast for typical student uses.

One area where it makes some sense to splurge is in hard disks. Students tend to be electronic pack rats, and the video and audio clips that they collect off the Internet can fill up a disk fast. I'd go with at least a four-gigabyte drive, which is now the standard on all but the cheapest desktops.

Modems are standard equipment on nearly all PCs. If dorm rooms are wired for network access, the modem will probably go unused. But make sure any modem you do get complies with the new v.90 international standard for 56K communications. An adapter card is required to plug into a campus network, but it's a good idea to wait and get one from the campus computer store, which will make sure that it's the right card and provide help in installing it.

I normally advise buyers to get the biggest and best monitor they can afford, but that has to be modified for students. Dorm rooms can be tiny, and a 19-inch monitor might leave your student with nowhere to sleep. Even a 17-inch may be tight. Think about space before buying a monitor.

One advantage of the Compaq Presario 2254 (table), beyond its attractive price, is its tidy desktop design. Although expansion space is limited, it does have a free slot for a network card. A machine like this is best for the student who isn't a computer aficionado but needs a PC as a tool.

A step up from the Presario, the Gateway G6-300, is an example of a mainstream computer of a sort avai at a similar price, from manufacturer. The 300- Pentium II is plenty fa most student needs avoids the hefty premiu would pay for the 350- 400-MHz models.

LOCK IT UP. Although still pay a premium desktop prices for equal formance in a laptop, t a case to be made for books. Not only are the ultimate space-savers b ability to take them where on campus c a big advantage. Toshiba Satellite 25 offers a lot of valu should serve any dent well. If yo choose a laptop, Kensington cable l secure it. Theft is a lem in all dorms, an tops are especially t ing targets.

A fair number o dents have grow with Macintoshes would like to go ing them in colleg at the moment, it' to figure out just advice to give. cheapest current model costs a hefty without a monitor. A li number of older models Apple and Umax are able, but they may r expensive processor up to run future Mac so The $1,299 all-in-one due in mid-August, co an ideal solution, but advance sales are lik keep it in short supply late in the year. Th interim solution, wher sible, just may be t an existing computer.

Between no graduation, the of '02 will r bills, in many pushing $150,0 at least a sma fort that com share of the small—and g smaller.

Three for the Dorm Room

	CHIP	RAM (MB)	HARD DISK (GB)	FEATURES	MONITOR SIZE	MODEM	PRICE
COMPAQ PRESARIO 2254 DESKTOP	266 MHz AMD K6	32	4	CD-ROM and floppy	14 in.	56K	$978 after rebate
GATEWAY G6-300 MINITOWER	300 MHz Pentium II	32	5.0	DVD-ROM and floppy	17 in.	56K	$1,667
TOSHIBA SATELLITE 2505CDS LAPTOP	233 MHz MMX Pentium	32	2.1	fixed floppy and CD-ROM	12.1 in.	56K	$1,399

DATA: MANUFACTURERS

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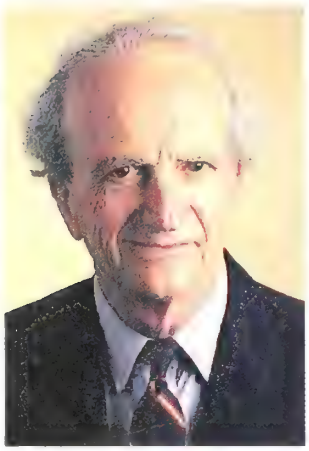
BY GARY S. BECKER

A FREE-MARKET WINNER VS. A SOVIET-STYLE LOSER



OLD HABITS Georgia, which put reforms in place quickly, is thriving, while Uzbekistan, still dragged down by state controls, withers

I recently visited several small ex-Soviet republics, including Georgia and Uzbekistan, that have followed very different policies after becoming independent of Russia. The sharp contrast in their performance vividly demonstrates the economic advantages of speedy transitions to market economies. However, the comparison also explains why many ex-communist nations have found it difficult politically to move quickly.

The Republic of Georgia, a nation of only 5 million people situated in the beautiful Caucasus mountains, went through a bloody civil war against Russian-supported groups between 1990 and 1992. Since 1994, President Eduard A. Shevardnadze of *perestroika* fame has led the nation rapidly toward fundamental changes. In that year, Georgia created a new currency after a nasty bout of hyperinflation, and annual price increases have been in single digits for the past couple of years.

LOOKING FOR CASH. All government-owned small- and medium-size businesses, and many large ones, have been privatized, and wages and most prices have been freed. The private sector now accounts for about three-quarters of total output. Young, energetic entrepreneurs are starting small businesses at a fast rate and are looking for foreign investors for capital. Although gross domestic product fell drastically during the civil war, it has been growing from 7% to 11% during each of the past three years.

The International Monetary Fund supplied desperately needed financial assistance during the first few years, but some of its advice has become an obstacle to further progress. The IMF has been pressing the government to raise taxes although rates are already too high for a poor nation that desperately needs to encourage investment and hard work. The VAT and profit tax rates equal 20%. To avoid such a heavy burden, almost half the economy has moved underground, so that tax revenues are less than 10% of output. I believe that either Georgia's VAT or income tax alone would be more than sufficient, and all other taxes should be abolished. The result would be greater investment, faster growth, a decline in the black economy, and perhaps even larger revenue from taxation.

However, Georgia apparently can only introduce such tax cuts by ending its dependence on the IMF. To ensure that the rate of growth does not slow, the U.S. should consider replacing the IMF funds. A prospe Georgia would show all the countries i Caucasus and Central Asian regions that ket-oriented domestic policies, and no pendence on Russia, are the path to eco ic success.

Unfortunately, Uzbekistan's policies mainly the opposite of Georgia's. Wh pays lip service to a good World Bank for extensive privatizations, Uzbekistan only privatized a small part of the ecor Economic activities are still tightly contr by various government monopolies that depressed production. As a result, aggr output is stagnating and perhaps even fa even though it is already at a distress low level. Uzbekistan is still pursuing th Soviet-style approach through a powerfu thoritarian President, limited freedom o pression, and a stubborn reluctance to gi centralized direction of the economy. De outstanding historical sites that could a tourism to Samarkand and other cities the old silk route from China, Uzbekista an unpromising future.

DESPERATION. The contrast between Ge and Uzbekistan shows that the best w generate growth is through speedy tr tion toward a decentralized economy. Y form also has a short-run price that exa the reluctance of most ex-Soviet republ change quickly. Free markets provide mous opportunities for the young and n getic, but they often hurt politically influ groups who benefited from the old sy pensioners, employees at inefficient sta terprises, and government officials. President Shevardnadze replied to my pliment on the rapidity of reforms in G by saying they had no choice, since they desperate.

Experience shows that political oppo to needed reforms becomes stronge weaker, the more they are delayed. I long run, the economies of Georgia, P and others that have reformed quickly w outstrip the laggards because their hi growth rates will have an enormous cu tive effect. The elderly as well as the y will eventually be much better off in co that change rapidly than in Uzbekistan, baijan, Romania, and other nations of C Asia and Eastern Europe that cling t mand-and-control economies for short-r litical advantages.

Gary S. Becker, the 1992 Nobel laureate, teaches at the University of Chicago and is a Fellow of the Hoover Institution

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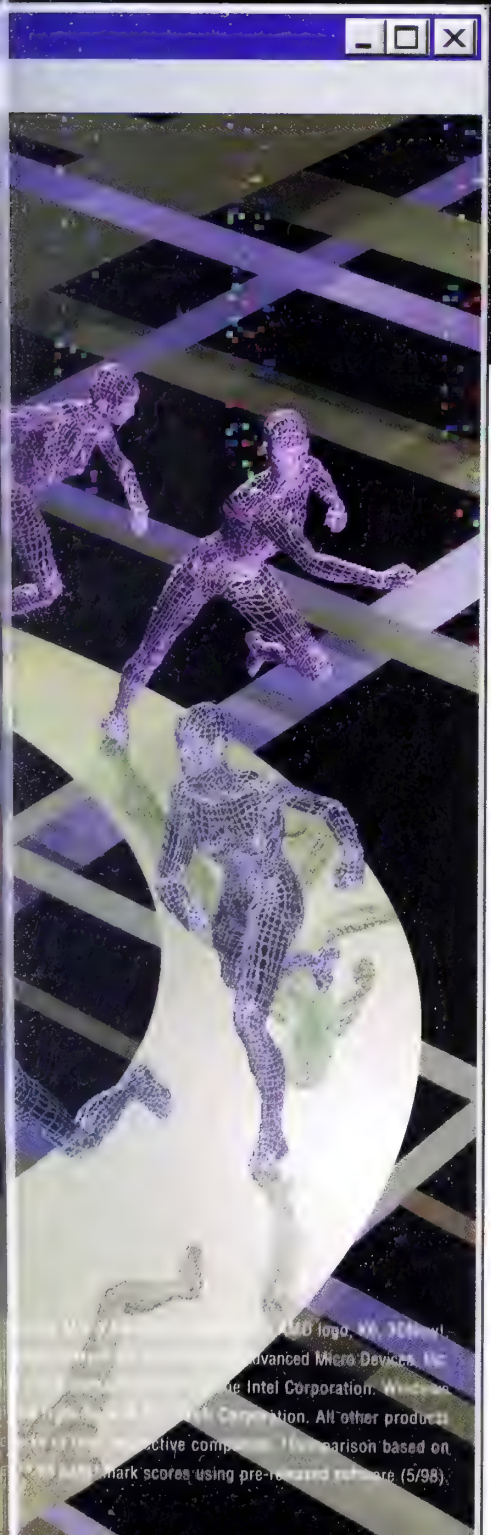

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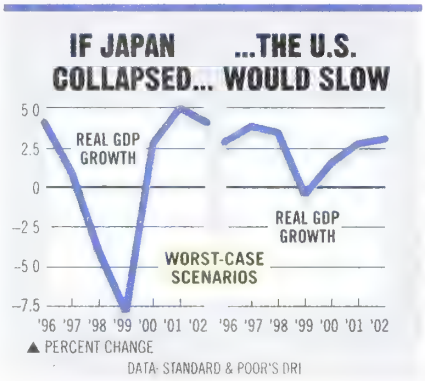
BY DEAN FOUST

WHAT IF JAPAN SANK DEEPER?

In one model, a mild U.S. slump

Global policymakers fear that if Japan doesn't close its insolvent banks and pump up its moribund economy, its festering problems could turn into a global crisis. But how exactly would that play out? Economists from Standard & Poor's DRI recently set out to quantify the consequences of a Japanese crash for the rest of the world, including the U.S. The outcome for the U.S.: bad, but not catastrophic.

The economists chose a scenario that they estimated had a 20% to 25% chance of occurring. (Their base forecast calls for Japan's economy to shrink



2.7% this year and a modest 0.8% in 1999.) In the scenario, several of Tokyo's largest banks fail. Panic-stricken investors pull their money out of the country. The Japanese economy shrinks 10% over two years, while its currency collapses so that the dollar is worth more than 200 yen, and the Nikkei stock index plunges.

Under this scenario, China's growth slows to 1%, and most other Asian nations suffer deepening recessions. A collapse in Asian currencies socks U.S. exports and corporate profits, which in turn causes a 25% crash in stock prices on Wall Street. The U.S. economy suffers a mild recession, with output falling 0.5% in 1999 and then bouncing back with 1.5% growth in 2000 (chart). Western Europe escapes a recession entirely.

The relatively modest impact on the Western industrialized countries assumes that U.S. and European policymakers make the right choices, says Nariman Behravesh, chief international economist for Standard & Poor's DRI, which is owned by The McGraw-Hill Companies, also publisher of BUSINESS WEEK. "If the Federal Reserve learned the lessons of the 1930s and cut rates aggressively, we could come out of this quickly."

Indeed, DRI's conclusions are based on the assumption that Federal Reserve Board Chairman Alan Greenspan slashes the overnight federal funds rate, now 5.5%, to 2.5%—a move that helps push yields on the benchmark 30-year Treasury to less than 5%. The domestic economy also is cushioned by a further decline in commodity prices, including a drop in oil to $9 a barrel by late 1999.

DRI estimates that the European economy would see growth slow from about 2.5% otherwise to roughly 1%. That reflects Europe's growing economic momentum and its relatively low level of exports to Asia. The Asian crisis would be felt most in such emerging economies as Russia, Ukraine, Brazil, South Africa, and most of the Mideast that depend on commodity exports.

A STRONG DOLLAR ISN'T SO BAD

Not all imports are really foreign

Economics 101 would suggest that the rising dollar should be bad news for the bottom lines of most U.S. corporations. Reason: The soaring greenback makes American exports more expensive at the same time that U.S. companies are finding their domestic sales undercut by ever-cheaper imports. Plus, profits from foreign operations look smaller in dollar terms.

Indeed, the trade deficit has widened on cue. But profits haven't been hurt as much as some pundits had predicted.

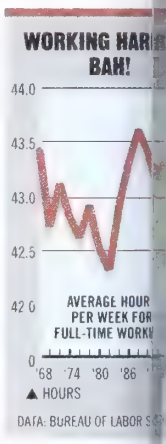
Why? Joseph P. Quinlan, international economist for Morgan Stanley Dean Witter, believes that's because a large chunk of the imports landing on U.S. shores are actually from U.S. multinationals—which are reaping a windfall in their overseas sourcing and production costs. Quinlan notes that in 1995, the last year for which data are available, U.S. imports from American foreign affiliates represented $143.3 billion, or roughly 20% of all incoming goods. Among Asia's Tiger economies, the share is even greater: More than 80% of American imports from Singapore and more than 50% of imports from Hong Kong are from U.S. affiliates.

KILLER HOURS ARE A MYTH

Full-timers aren't working mo

Ever since the 1991 release of Schor's *The Overworked Ameri* a book that resonated with stressed-out, two-income couples—omists have debated whether Ame truly are working harder just t in place. Schor used data from the ernment's *Current Population S* and other sources to argue that A cans worked an average of 163 hours per year in 1990 than the two decades earlier, caught in "c ism's squirrel cage."

But Anita U. Hattiangadi, an mist for the Employment Policy dation, notes that critics have holes in Schor's numbers. For one Barry Bluestone of the University of Massachusetts at Boston and Stephen Rose of the Educational Testing Service last year found that average working time per year had increased by only 66 hours over the period—when looking only at people in their prime working years and correcting for fluctuations in the business



Moreover, the largest increas hours have come in better-edu higher-income households. To Ha gadi, this suggests that increase at work "is largely a choice rathe an economic necessity."

Hattiangadi focuses on the len the average workweek for full-tim ployees. This measure, based *Current Population Survey*, inc the self-employed and people wit tiple jobs. It has been essentially since 1968, fluctuating between 44 hours a week.

The full-time workweek nu might actually have fallen since t 1960s, Hattiangadi says, if not for mographic shift that produced a proportion of "prime-age" workers— 25 to 54 years old, who are the likely to put in long hours. Hatti notes that time diaries collected b Robinson of the University of Ma and others find that Americans more leisure time now than in the

MES C. COOPER & KATHLEEN MADIGAN

HEN BAD QUARTERS PPEN TO GOOD ECONOMIES

vth stalled. But Greenspan sees inflation, not weakness, as the No. 1 risk

.S. ECONOMY In a word, the economy's performance so far this year has 'impressive." So said Federal Reserve Chairman Greenspan in his semiannual testimony on monetolicy before Congress. What Greenspan also acdged, however, is that this impressive expansion peed bump in the second quarter. As the chairıccinctly put it: "Growth of U.S. output appears e slowed sharply."

sharply won't be known until the Commerce releases its gross domestic product report on 1. But the monthly data suggest that an abrupt own in inventory building and another huge ng in the foreign trade deficit deducted some rcentage points from GDP growth, offsetting sub-l gains in consumer spending, housing, and busiıvestment. As a result, real GDP probably did ow at all last quarter. Some economists even real GDP shrank, with softness expected in the uarter as well (page 30).

IE FED'S VIEW THE ECONOMY

	1998 PERCENT	1999 PERCENT
	3.00-3.25	2.00-2.50
ER	1.75-2.00	2.00-2.50
	4.25-4.50	4.50-4.75

T CHANGE Q4 TO Q4, EXCEPT RATE WHICH IS Q4 AVERAGE
DATA: FEDERAL RESERVE

But the second quarter's weakness may not signal a prolonged slowdown. The economy continues to enjoy solid job and income growth, accommodative credit conditions, a booming stock market, and low inflation. In fact, the Fed's own forecast for 1998 implies that real GDP growth will rebound to more than 3% in the second half before slowing in 1999.

eover, the GDP release will contain benchmark re- to the historical data, which may affect the out- or example, the numbers now say that first-quar- entory levels grew by an unprecedented $105.7 —eclipsing the previous record by a huge $18 bil- inventory growth is revised lower, then the in- y adjustment in the second quarter and beyond be less of a drag on growth. Greenspan himself at, without knowing the revisions, assessments of ive second quarter are "conjectural."

'HELESS, EVEN IF THE DRAG from inventories ller than expected, real GDP still struggled to nto the plus column. The chief reason was the ning chasm between exports and imports.

The May trade deficit for goods and services widened to a record $15.7 billion, up from $14.3 billion in April. Both numbers show a sharp expansion from the first-quarter average of $11.6 billion, which was up from $9.5 billion in the fourth quarter. Taken by itself, the second-quarter increase in the trade gap appears to have subtracted 2½-to-3 percentage points from the quarter's GDP growth.

A dropoff in exports to Asia has been the primary influence. Exports fell 1.3% in May, after posting a 2.4% loss in April. Since July of last year, when the Asian crisis began, U.S. shipments of goods to all Pacific Rim countries have dropped by $3.6 billion, using Commerce Dept. data that have been seasonally adjusted by BUSINESS WEEK. That decline more than accounts for the $2.7 billion falloff in overall exports of goods and services during that time.

MEANWHILE, IMPORTS from most everywhere continue to arrive at a rapid clip, sucked in by strong U.S. demand. Foreign goods and services increased 0.5% in May, and since last July they have risen by $4.2 billion. And because of falling import prices, the rise in the actual volume of imports has been much larger than the dollar figures suggest.

Erosion in the trade deficit reflects more, however, than just weak Asian demand. It appears that the three-year rise in the trade-weighted dollar is finally crimping the competitiveness of U.S. companies. Indeed, exports of goods to destinations other than Asia have also fallen off this year, especially shipments to Europe—and European growth is generally picking up. In the past six months, non-Asian countries have accounted for more than half of the widening in the merchandise trade deficit (chart).

The good news is that in April and May, the deterioration in the trade deficit with Asia slowed. The bad news for the second half: Even as the export drag starts to lift, Asia is only now beginning to send more imports this way. Moreover, the strong dollar will crimp all U.S. exports and keep imports washing ashore. In fact, by yearend, the U.S. current account deficit, which includes trade and certain financial trans-

actions, will probably climb above 3%, a level that often has preceded a tumble in a country's exchange rate.

NEEDLESS TO SAY, the swings in trade and inventory growth have hit goods producers the hardest. In fact, Greenspan's remark referred to a possible sharp slowdown in "output" last quarter, not in demand.

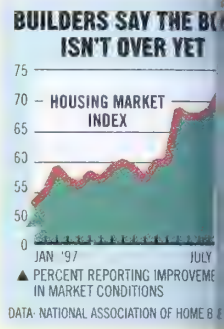
Industrial production fell 0.6% in June, as did factory output alone. True, the General Motors Corp. strike caused an 11% drop in vehicle production. But even excluding autos, factories eked out just a 0.1% output gain in June. Total factory output grew at an annual rate of 1.7% last quarter, the smallest gain in more than two years, as manufacturers felt the squeeze from weak foreign demand and slower stockpiling.

Looking ahead, the GM strike is subtracting even more from July output, and it may well drag on through the entire quarter. When the strike is over, however, auto output will bounce back sharply.

The manufacturers that did do well in the second quarter were the ones that cater to domestic customers: Appliance, home-electronics, and business-equipment manufacturers all increased production handily in response to solid demand in the U.S. last quarter. Real consumer spending increased about 5%—an amazing gain considering that it follows a 6% surge in the first quarter. And shipments of capital goods suggest that business outlays for equipment increased ag

Another plus for GDP growth was homebuild Housing's ongoing strength is somewhat surpri since the mild winter had boosted home constructi record levels in the winter. That led to expectatio a weak second quarter. Instead, residential constru probably continued to grow last quarter after soa at a 16.9% annual rate in the first.

In addition, housing starts ended the second quarter on a strong note: They increased 5.6% in June, to an annual rate of 1.615 million. And builders are quite optimistic. The Housing Market Index—a compilation of readings on current sales, expectations, and buyer traffic—hit another record in July, rising to 72% from June's 71% (chart).



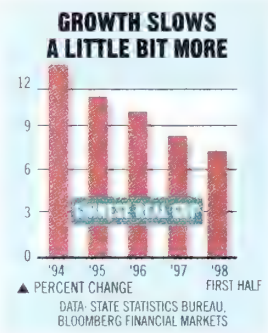
Healthy consumer demand may be buoying buil spirits, but it's also clouding the view of the Fed C man. Despite the economy's weak second qua Greenspan made it clear that the Federal Reserv mains vigilant against overheated demand forcing u flation. And in his view, the risks remain greater fo celerating inflation than for any protracted weakne the economy.

CHINA

GROWTH—BUT NOT ENOUGH OF IT

China's growth might produce envy among its neighbors, but the economy has slowed enough to raise worries about unemployment and devaluation.

On July 17, the government said real gross domestic product grew 7% in 1998's first half compared with a year ago, down from an 8.8% gain for all of 1997 (chart). Retail sales were up 6.8% in the first half, while fixed asset investment—a proxy for capital spending—rose 13.8%.



The government also said that a rising trade surplus accounted for a quarter of the growth in the first half. But the outlook for trade is troublesome because of the financial crisis in the rest of Asia and poor weather. Export growth has slowed to 7.6% in the first half, down from 21% a year earlier, with a drop in shipments to Southeast Asia and Japan. And a drought in China's farm belt and simultaneous floods elsewhere have caused crop losses, leading to an increase in grain imports.

A weaker trade picture is a big reason real GDP will slow further in the second half, probably resulting in 6% growth for all of 1998, the slowest since 1990. And that is not fast enough to absorb the millions of workers let go by inefficient companies as China industry tries to modernize and privatize.

In response, the Bank of China has cut interest rates five time the past 26 months. On June 3 the bank slashed rates by mor than a percentage point. The move will help cash-strapped c panies but will do little to stim late consumer spending since most consumers have little acc to credit. A recent survey foun worries of layoffs are causing households to delay purchases.

The Bank of China has great leeway to cut rates even more cause prices continue to fall. C sumer prices are down 3% in t year ended in June. But lower rates and deflation are raising pressure for a currency devalu tion. Beijing remains resistant such a move—which is good n for the rest of Asia. A cheaper yuan would likely create a dev ation spiral across Asia, prolon ing the recessions in the regio

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a sentence starting with *"That's fine, except*
n't…", ViaVoice 98 knows to spell *"except"*
"accept." How? It recognizes the two words

e-business tools

before and after *"except"* and instinctively picks the most likely spelling based on the context. New ViaVoice 98 with triple-word algorithms. Starting at just $49†, it's not only accurate, it's right on the money. Look for ViaVoice 98 at your favorite software retailer. And for more information, visit **www.ibm.com/viavoice** or call **1 800 IBM-2255.**

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THE ECONOMY

A JEKYLL-AND-HYDE ECONOMY

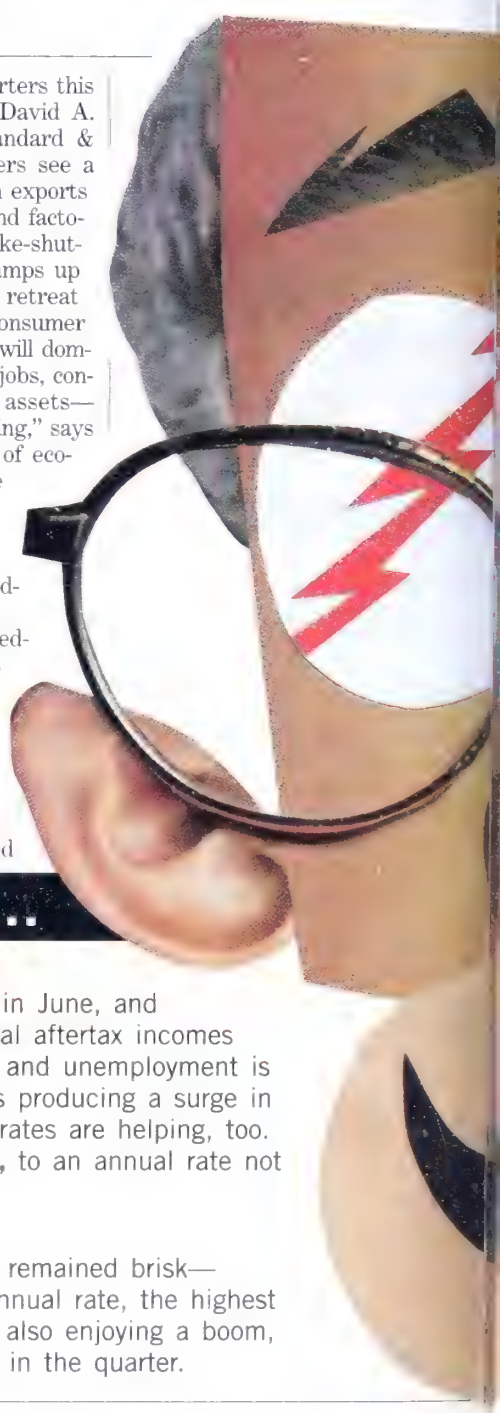
Consumers are still driving demand, but Asia is hurting manufacturers

It's the economy with two faces. The Asian financial crisis is knifing through U. S. manufacturing, cutting exports to the bone and slashing commodity prices. Companies such as Polaroid are curbing shipments until swelling inventories can be sold. Profits are harder to come by. Yet service companies are scrounging for help: Manpower Inc. says white-collar hiring leaped 13% in the spring. Wages are up smartly, as are incomes. The stock market is booming, interest rates are low, and Americans are buying—producing happy retailers and the biggest housing boom in a decade.

Which side will prevail? During the first quarter, the domestic economy was in control. Consumer demand surged, and the economy rocketed along at a 5.4% annual clip. But in the second quarter, the deepening Asian crisis and the strong dollar were the dominant forces. Factory output dropped 0.6% in May, and 29,000 factory jobs vanished in June. May's trade deficit, at $15.75 billion, was a record. When the Commerce Dept. tallies second-quarter results on July 31, the figures will likely show that the economy didn't grow at all. Forecasts range from a 1.5% drop in gross domestic product to a 1% rise.

So is this it—the beginning of the end of the nearly eight-year expansion? Probably not. In the worst case, "we could be looking at two negative quarters this year—a mild recession," says David A. Wyss, chief economist for Standard & Poor's DRI. But most forecasters see a happier scenario: The decline in exports to Asia will soon bottom out, and factories will get a boost when strike-shuttered General Motors Corp. ramps up again. Then—barring a sharp retreat in the stock market—strong consumer demand and capital investment will dominate once again. "People have jobs, confidence, incomes, and strong assets—they're not going to stop spending," says Everett M. Ehrlich, president of economic consultant ESC Co. The consensus: By the fourth quarter, growth will be back above a 3% annual rate before the economy settles into a more moderate pace in 1999.

INFLATION? That's what the Federal Reserve expects. Giving his midyear view of the economy on July 21, Fed Chairman Alan Greenspan warned that "the potential for accelerating inflation is probably greater than the risk of protracted, excessive weakness." So the Fed



THE GOOD NEWS...

IN THE OVERALL ECONOMY

Service-sector jobs rose **215,000** in June, and hours worked increased **2.4%**. Real aftertax incomes are rising at a **3.6%** annual rate, and unemployment is holding near a 28-year low. That's producing a surge in consumer spending. Low interest rates are helping, too. June housing starts rose by **5.6%,** to an annual rate not seen since 1989.

IN INDUSTRY

Despite the GM strike, auto sales remained brisk—approaching a **16.6 million**-unit annual rate, the highest volume since 1986. Retailers are also enjoying a boom, with overall retail sales rising **8%** in the quarter.

ing toward raising rates, not eas-
em. That helped send the Dow
ng 166 points on July 21 and 22.
of overheating seems strange in
where Asia's woes are now hitting
The port of Los Angeles has so
unused containers that they're be-
elded into a retaining wall on the
Coast Highway in Malibu. On
l, Walt Disney Co. said steep drops
o sales to Asia and fewer Japan-
urists at Disneyland helped shave
nings by 12.2%. AMP Inc., a maker of electrical connectors, shut down plants in Pennsylvania and North Carolina on July 17 because of slumping sales across the Pacific.

The collapse of commodity prices, prompted by the Asian crisis, is also rippling through the U.S. economy. The sharp drop in oil has idled 14% of the offshore rigs in the Gulf of Mexico, and prompted Nabor Industries Inc. to slash 1,400 jobs. Washington is talking about emergency relief to help farmers who are watching prices plunge and export orders evaporate.

Meanwhile, many high-tech highfliers have been feeling the pinch—both from Asia and from price wars in the U.S. At Compaq Computer Corp., profits before acquisition charges fell 87%. Chip giant Intel Corp. reported a 29% drop in profits and a contraction in shipments. One reason: Makers of hot-selling sub-$1,000 PCs are using lots of non-Intel chips. Another high-tech victim is Hewlett-Packard Co., which warned that profits for its fiscal quarter ending on July 31 would be flat because of slow sales to Asia. Computer Associates issued a similar warning the next day.

Then there's Detroit. In the second quarter, the U.S. market surged to a rebate-fueled annual sales rate of 16.6 million, helping Chrysler Corp. and Ford Motor Co. post record profits. But analysts, who say sales for all of 1998 will total 15.3 million units, predict that activity will slow in the second half.

The big question is when GM will resume production. The auto giant's virtual shutdown trimmed half a percentage point off second-quarter growth, while its 73% drop in operating earnings exacerbated the 2% earnings gain by 85 other companies in BUSINESS WEEK's flash profits survey (page 32). GM's pain is being felt across industrial America. Chicago's A. Finkl & Sons, which makes molds used by auto-parts suppliers, stretched its annual summer shutdown from two weeks to three because of strike-softened demand. "Customers are asking us to hold their orders" for up to a week, says Chief Financial Officer Joseph E. Curci.

Yet forecasters say the stage may be set for a healthy fourth-quarter rebound. If GM can settle its labor problems in August, its restart alone could add 1.3% to fourth-quarter GDP, says Joel Prakken, chairman of St. Louis-based Macroeconomic Advisers.

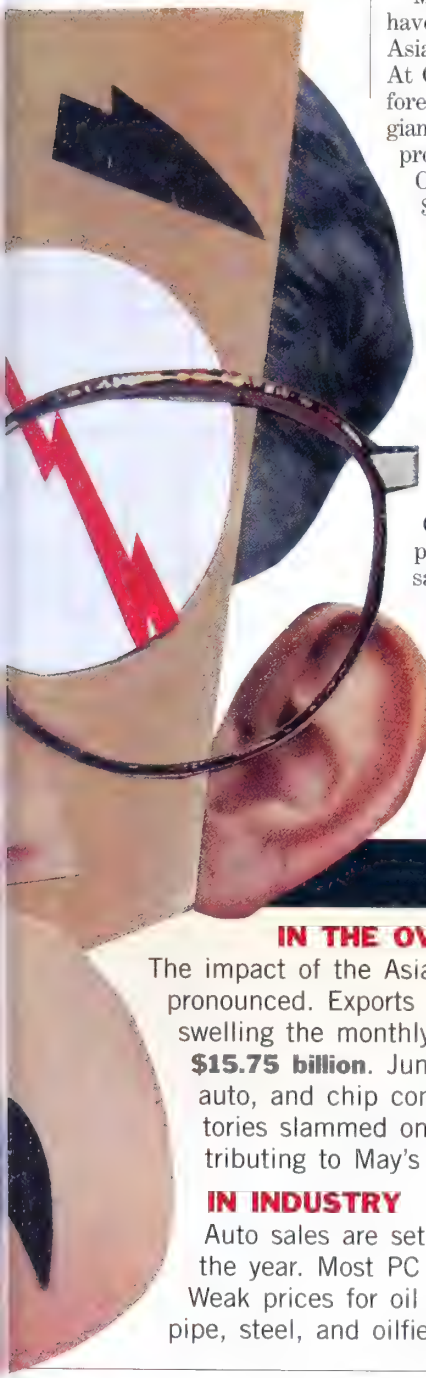
SERVICE STRENGTH. If things keep perking along in the service economy—where 80% of the U.S. workforce is employed—the manufacturing slowdown will be remembered as a minor blip. The service sector has added 1.4 million jobs this year, including 215,000 in May. In all, service companies' profits grew 20% on a 16% rise in sales during the spring quarter, according to the flash profit report.

For proof, check the mall—if you can find a parking spot. With real aftertax incomes rising at a 3.6% annual rate, Americans are spending freely. Second-quarter retail sales were up 8%. At Wal-Mart Stores Inc., same-store sales were up 9% in June. Consumer confidence and low interest rates are cranking up the housing market to its hottest level in 13 years. Builders started new houses at a 1.6 million-unit annual pace in June.

Will consumer confidence ebb? Not as long as the stock market remains strong. Even with current drops, key market indexes are in record territory. "Most consumers don't even know that Asia has happened," says James E. Glassman, chief economist at Chase Securities.

Are they simply blind to the dark side? Perhaps. But given the strength they see around them, Americans can be forgiven for not looking overseas for trouble. As long as Wall Street keeps smiling, consumers will, too.

By Mike McNamee in Washington, with De'Ann Weimer in Chicago, Gary McWilliams in Houston, and bureau reports



...THE BAD NEWS

IN THE OVERALL ECONOMY

The impact of the Asian economic crisis is getting more pronounced. Exports to Asia fell **$26 billion** in May, swelling the monthly U.S. trade deficit to a record **$15.75 billion**. June probably wasn't any better. PC, auto, and chip companies that had been building inventories slammed on the brakes in April and May, contributing to May's **0.6%** drop in industrial production.

IN INDUSTRY

Auto sales are set to slow and reach **15.3 million** for the year. Most PC makers remain in the doldrums. Weak prices for oil and other commodities are hurting pipe, steel, and oilfield-service companies.

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PROFITS

A TURNING POINT FOR CORPORATE EARNINGS

Looking for signs of a slowdown? The 86 companies in BUSINESS WEEK's flash report on second-quarter profits saw earnings fall 6% on a mere 1% uptick in revenue. Indeed, at Texaco Inc., a 30% drop in sales led to a 40% profits plunge. But excluding abysmal results at General Motors, Compaq, and Motorola, quarterly profits rose 14%. Good news came from SBC Communications, Ameritech, and Chrysl

	CURRENT QTR. SALES (MILLIONS)	% CHG.	QTR. PROFITS (MILLIONS)	% CHG.	EST. EPS (5/14)	REPORTED EPS	DIFF.
INDUSTRIALS	30,209.3	–4	21,763.2	**–2**	1.79	1.75	–0.04
ALCOA	3,587.0	+5	207.1	**0**	1.25	1.24	–0.01
ALLIEDSIGNAL	3,869.0	+8	350.0	**–15**	0.60	0.61	+0.01
BESTFOODS	2,114.3	0	172.3	**NM**	0.58	0.58	—
BLACK & DECKER	1,169.7	–1	58.4	**–28**	0.56	0.61	+0.05
BRISTOL-MYERS SQUIBB	4,430.0	+9	835.0	**–13**	0.83	0.82	–0.01
CATERPILLAR	5,604.0	+15	446.0	**–3**	1.22	1.20	–0.02
CHRYSLER	16,488.0	+20	1,003.0	**+108**	1.41	1.51	+0.10
COCA-COLA	5,151.0	+1	1,191.0	**–9**	0.47	0.48	+0.01
COCA-COLA ENTERPRISES	3,687.0	+27	111.0	**0**	0.31	0.27	–0.04
CONAGRA †††	5,881.5	+1	168.7	**–10**	0.39	0.36	–0.03
CROWN CORK & SEAL	2,245.0	–2	125.7	**–5**	1.01	0.95	–0.06
DANA	2,340.3	+9	116.0	**+24**	1.07	1.08	+0.01
DUPONT	11,140.0	–2	959.0	**–16**	1.03	0.83	–0.20
EASTMAN KODAK	3,541.0	–8	495.0	**–35**	1.15	1.51	+0.36
EXXON	29,626.0	–13	1,620.0	**–18**	0.66	0.65	–0.01
FORD MOTOR	37,289.0	–7	2,381.0	**–6**	1.64	1.91	+0.27
GENERAL ELECTRIC	25,070.0	+14	2,450.0	**+13**	0.74	0.74	—
GENERAL MOTORS	38,901.0	–14	389.0	**–81**	2.31	0.52	–1.79
GEORGIA-PACIFIC GROUP	3,275.0	–1	30.0	**NM**	0.35	0.33	–0.02
GILLETTE	2,325.0	–2	372.0	**+11**	0.34	0.33	–0.01
GOODYEAR TIRE & RUBBER	3,137.5	–5	199.0	**+10**	1.31	1.26	–0.05
IBP	3,334.3	–3	33.9	**0**	0.28	0.36	+0.08
INLAND STEEL INDUSTRIES	724.9	–1	15.5	**–19**	0.52	0.51	–0.01
INTERNATIONAL PAPER	4,700.0	–6	86.0	**NM**	0.36	0.28	–0.08
JOHNSON & JOHNSON	5,783.0	+1	1,005.0	**+11**	0.74	0.74	—
LOCKHEED MARTIN	6,520.0	–5	289.0	**–6**	1.57	1.52	–0.05
MATTEL	861.5	–11	60.4	**–20**	0.27	0.20	–0.07
MERCK	6,470.4	+9	1,316.1	**+14**	1.08	1.07	–0.01
MOBIL	13,233.0	–21	642.0	**–24**	0.91	0.79	–0.12
NIKE †††	2,307.8	–3	–67.7	**NM**	0.03	–0.23	–0.26
NORTHROP GRUMMAN	2,139.0	–4	93.0	**–14**	1.74	1.34	–0.40
PEPSICO	5,258.0	+3	494.0	**+181**	0.33	0.33	—
PFIZER	3,633.0	+25	628.0	**+37**	0.43	0.47	+0.04
PHILIP MORRIS	18,978.0	+3	1,799.0	**–2**	0.83	0.82*	–0.01
PPG INDUSTRIES	2,004.0	+3	199.0	**–9**	1.32	1.11	–0.21
ROHM & HAAS	990.0	–9	180.0	**+54**	2.00	2.01*	+0.01
SCHLUMBERGER	2,853.3	+10	359.4	**+17**	0.74	0.69	–0.05
SHERWIN-WILLIAMS	1,377.8	0	99.5	**+7**	0.58	0.57	–0.01
TEXACO	8,044.0	–30	342.0	**–40**	0.60	0.61	+0.01
UNITED TECHNOLOGIES	6,665.0	+3	360.0	**+18**	1.38	1.44	+0.06
WEYERHAEUSER	2,676.0	–8	69.0	**–37**	0.49	0.34	–0.15
WHIRLPOOL	2,585.0	+25	81.0	**–31**	1.02	1.05	+0.03
SERVICES	76,154.9	+16	10,486.6	**+20**	0.83	0.86	+0.03
AMR	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
BANKAMERICA	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
CHASE MANHATTAN	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
CITICORP	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
CNF TRANSPORTATION	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
DISNEY (WALT) ††	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
DOW JONES	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
ENRON	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
FDX †††	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
FIRST CHICAGO NBD	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
FIRST UNION	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
HEALTHSOUTH	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
HERTZ	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
KROGER	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
MARRIOTT INTERNATIONAL	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
McDONALD'S	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
McGRAW-HILL	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
MERRILL LYNCH	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
MORGAN (J.P.)	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
MORGAN STANLEY, DEAN WITTER	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
NATIONSBANK	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
NEW YORK TIMES	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
OFFICE DEPOT	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
TIME WARNER	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
TRAVELERS GROUP	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
UAL	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
TECHNOLOGY	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
APPLE COMPUTER ††	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
COMPAQ COMPUTER	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
COMPUTER ASSOCIATES †	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
GENENTECH	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
IBM	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
INTEL	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
MICROSOFT †††	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
MOTOROLA	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
SUN MICROSYSTEMS †††	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
TEXAS INSTRUMENTS	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
UTILITIES & TELECOM	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
AMERITECH	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
BELLSOUTH	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
GTE	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
LUCENT TECHNOLOGIES ††	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
PG&E	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
SBC COMMUNICATIONS	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
SOUTHERN	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14
SPRINT	5,012.0	+6	409.0	**+35**	2.16	2.30	+0.14

DATA: STANDARD & POOR'S COMPUSTAT, A DIVISION OF THE McGRAW-HILL COMPANIES. EARNINGS ESTIMATE DATA PROVIDED BY I/B/E/S INTERNATIONAL INC., NEW YORK, NY. I/B/E/S IS A REGISTERED TRADEMARK OF I/B/E/S INTERNATIONAL INC.

ITS NS)	% CHG.	EST. EPS (5/14)	REPORTED EPS	DIFF.
.0	+11	1.21	1.24	+0.03
.0	+16	1.19	1.20	+0.01
.0	+7	2.30	2.30	—
.4	+38	0.59	0.73	+0.14
.0	–12	0.26	0.20	–0.06
.7	NM	0.46	0.47*	+0.01
.0	NM	0.40	0.42	+0.02
.7	+93	1.15	1.14	–0.01
.0	+8	1.34	1.38	+0.04
.0	–63	0.90	0.92*	+0.02
.2	+44	0.28	0.28	—
.1	+39	0.62	0.69	+0.07
.3	–13	0.47	0.36	–0.11
.0	+20	0.36	0.37	+0.01
.8	–47	0.65	0.66*	+0.01
.8	+19	0.71	0.78	+0.07
.0	+13	1.23	1.33	+0.10
.0	+29	1.95	1.96*	+0.01
.0	+62	1.10	1.37	+0.27
.0	+53	1.13	1.15	+0.02
.7	–3	0.40	0.42	+0.02
.7	+50	0.26	0.27	+0.01
.0	+237	–0.04	0.04	+0.08
.6	+29	0.81	0.95	+0.14
.0	+17	2.99	2.44	–0.55
'5	NM	0 55	0.54	–0.01
.0	NM	0.35	0.65	+0.30
.0	NM	0.02	0.02*	—
.8	NM	0.74	0.34*	–0.40
.4	+70	0.31	0.31	—
0	0	1.52	1.50	–0.02
0	–29	0.70	0.66	–0.04
.0	+28	0.46	0.50	+0.04
0	NM	0.22	0.01*	–0.21
0	+15	0.71	0.69	–0.02
0	–81	0.47	0.35*	–0.12
5	+135	0.52	0.55	+0.03
0	+218	0.62	0.63*	+0.01
0	+25	0.79	0.82	+0.03
0	0	0.70	0.69	–0.01
0	NM	0.26	0.32*	+0.06
0	–10	0.39	0.46	+0.07
0	NM	0.50	0.52	+0.02
0	+26	0.36	0.39	+0.03
5	–17	0.45	0.49	+0.04

††Third-quarter results †††Fourth-quarter results
NA = not available *EPS adjusted for special items

WASHINGTON

THE SURPLUS: IT'S UP. IT'S DOWN. IT'S UP...

Weighty decisions are being based on some sketchy numbers

It's Washington's equivalent of finding a paper bag stuffed with $100 bills on the sidewalk. The Congressional Budget Office estimated on July 15 that the Treasury will boast a $1.6 trillion surplus by 2008—up an astonishing $932 billion from the CBO's estimate just four months ago. It took about a nanosecond for a gleeful House Speaker Newt Gingrich (R-Ga.) to draft plans for tax cuts. The White House insists on using the windfall to bolster Social Security.

These are weighty policy decisions. Yet they're based on forecasts that are pure guesswork about the next 10 years. Could Asia's woes or the Year 2000 glitch trigger a U.S. recession? Might the bull market turn bearish? "There's a Murphy's law of budgeting—you can't anticipate everything," concedes Rudolph G. Penner, CBO director from 1983 to 1987. "There's a 50% chance that the bottom line in 2003 will be $200 billion higher or lower" than the current forecast of a $136 billion surplus, he adds.

WHOOPS. Indeed, the only forecast that seems solid now is the one for the fiscal year ending Sept. 30—and even that has been sharply revised. In January, the CBO figured the budget would end up $5 billion in the red. But an unexpected flood of tax revenues now seems likely to create a $63 billion surplus. That's only if you include payroll taxes to finance Social Security, which is running a $104 billion annual surplus this year. Exclude the retirement system, and the government will be a tad in the red through 2008, the CBO says.

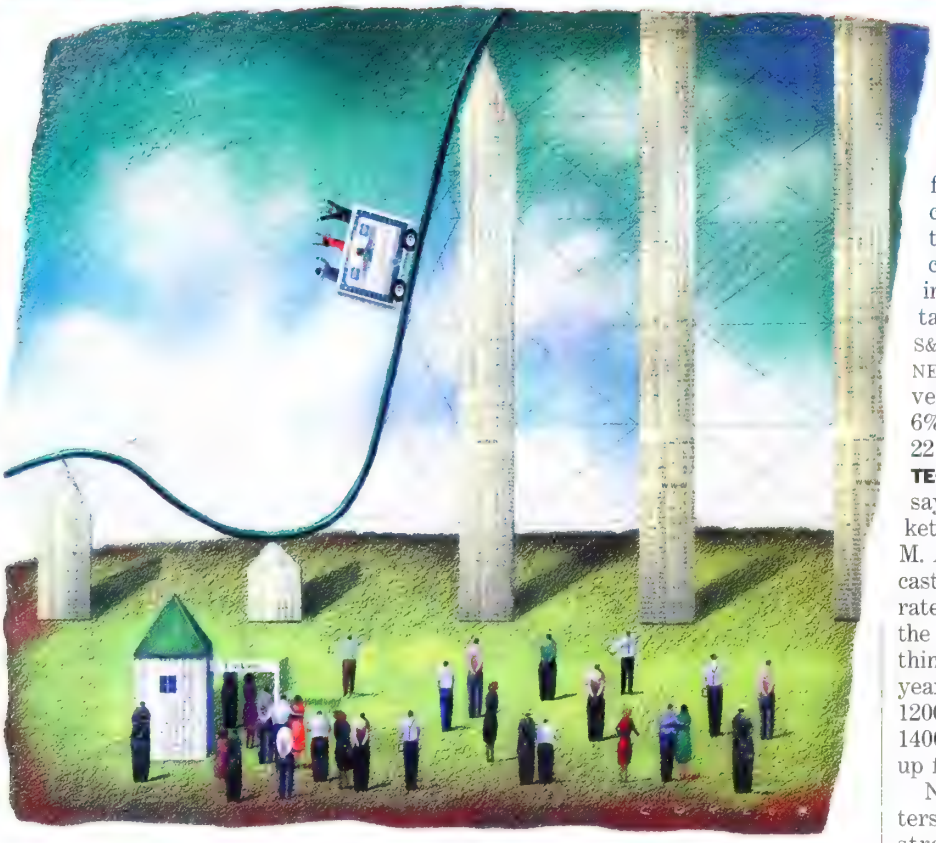
Even including Social Security, how realistic is the CBO's estimate? The agency conservatively assumed growth will average 2.2% a year through 2008, down from the 2.5% rate of the past 10 years and the 3% rate since 1994.

Pro-growth Republicans gripe that those estimates are low. They note that CBO forecasts have consistently understated the economy's growth over the past four years. "The errors have been enormous," acknowledges Alicia H. Munnell, a former member of President Clinton's Council of Economic Advisers. If the Republicans are right, the impact would be huge. Raise the growth forecast by 0.5%, and the accumulated surplus in 2008 would swell to $2.5 trillion. That's enough to fortify Social Security, pay down some of the national debt, and even provide some tax relief.

What about an error in the opposite direction? In the '80s, the CBO repeatedly understated the ballooning budget deficits. It could happen again. Suppose the U.S. has a mild recession in 1999 that lowers the gross domestic product by 0.8%. "The projected surplus would vanish, and you'd have a $100 billion deficit in 2000," says Penner.

When such small economic changes have so profound an effect, politicians need to proceed with caution. Making long-term commitments based on flaky estimates is a risky business.

By Owen Ullmann in Washington



WALL STREET

WHY THE BULLS ARE STILL BULLISH

Stocks may hold more thrills as '99 profits look strong

Sure, if you look at the decidedly mixed results that companies racked up in the second quarter, you might think that investors are just a bit overoptimistic. But if you skip ahead—say to the end of the year or, better yet, to 1999, you can not only justify today's prices but get pretty bullish about tomorrow's. That's why, despite the recent record highs scored by both the Dow Jones industrial average and NASDAQ, many Wall Street pros still see stocks rising.

Even as analysts trim forecasts for the third quarter, reflecting the impact of slowing growth (page 30), they are forecasting a 14.9% year-over-year gain for the last quarter of 1998. And they're even more bullish on 1999—even though the market retreated after Federal Reserve Chairman Alan Greenspan warned against "unrealistic" long-term earnings forecasts in Congressional testimony on July 21. For 1999, analysts expect operating earnings to advance 18%, says Chuck Hill, First Call Corp.'s director of research.

While some economists fret about a possible recession in '99, the bulls still see plenty of reasons for optimism. Even though Goldman, Sachs & Co.'s megabull, Abby Joseph Cohen, believes that Asia is a "moderate negative" for U.S. corporate profits, on July 20 she set her 12-month target for the Standard & Poor's 500-stock index at an "easily achievable" 1250 by midyear 1999, up from 1200 in mid-July. Cohen's forecast for 1998's second half: a global economy that sees "modest improvement" and "some acceleration" in S&P profit growth.

One reason she's optimi Comparisons will be easy 1997's midyear slowdown. C has long expected S&P 500 posite earnings to reach $50.5 share in 1998 and $55 in 199 from $46.76 in 1997. She has calling for 6% earnings growt the quarter just ended, a few centage points above the 3.7% in operating earnings that First tallies for the 260 companies in S&P 500 reporting as of July 21. NESS WEEK's less comprehensive vey of 86 companies came in w 6% drop in quarterly profits on 22 (page 32).

TECH SPARKS. Other bullish strate say lower inflation will keep the ket climbing. Lehman Brother's Je M. Applegate isn't raising his profit cast but believes low inflation, int rates, and stock market risk will the market's price-earnings multipl thinks the S&P 500 could hit 125 yearend, up from his previous targ 1200. In 1999 he sees the S&P 5 1400 and the Dow at roughly 11 up from 9128.9 on July 22.

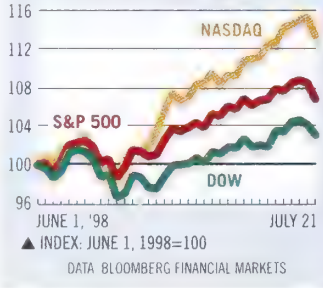
Never mind Greenspan's inflatio ters, either. On July 21, PaineWe strategist Edward M. Kersc trimmed his expectations for infl to 2% from 2.25%. When he crun that into his spreadsheet, he ca with an earnings model that, he will produce an S&P of 1430 in equivalent to an 11,250 Dow.

What will keep the market clim at these levels? Mostly high tech, Morgan Stanley Dean Witter stra Peter J. Canelo. Even though the DAQ composite is up almost 13% June 1, he thinks many tech-equip stocks have only begun to rise. T dustry is struggling with invent now, he says, but once they adjus good times will resume. "New s ing in tech should boost the eco and the decline of bond yields and gage rates will give us further str in consumer spen says Canelo.

Sure, many s are likely to s sharp declines i weeks ahead if a ings disappoint bulls will be lo well beyond that over the long the market's up march is not lik come to a halt.

By Suzanne W in Neu

A SIZZLING SUMMER FOR STOCKS—SO FAR



▲ INDEX: JUNE 1, 1998=100

DATA BLOOMBERG FINANCIAL MARKETS

COMMENTARY

By Bruce Nussbaum

THE SUMMER OF WRETCHED EXCESS

he institution of a leisure class found in its best development at higher stages of the barbarian ture . . ."
horstein Veblen, *The Theory of the sure Class*

o you have a personal jeweler? Does the nanny bubble deeply trouble you? Are you braving a r-down (demolishing that 20,000-are-foot perfectly nice house to up a 40,000-are-foot edifice t is more truly u")? Do you ieve $1,000 to e with President nton chez Alec dwin and Kim inger is small nge—less than price of a suit, r all? And do have both a d Rover with a k steel ram-g grill in front s a Porsche ter in your age (O. K., be a cute new tle, too, for r daughter who nds the Dalton ool)? ou probably do ou're among the tering classes summer in the mptons, that east end of g Island that is so awash in mon-his season that it makes the Rea- years look downright bourgeois. re, people are being driven to a stly frenzy of conspicuous con-mption not seen since—uh-oh—the y days of the late '20s, just be- the crash.

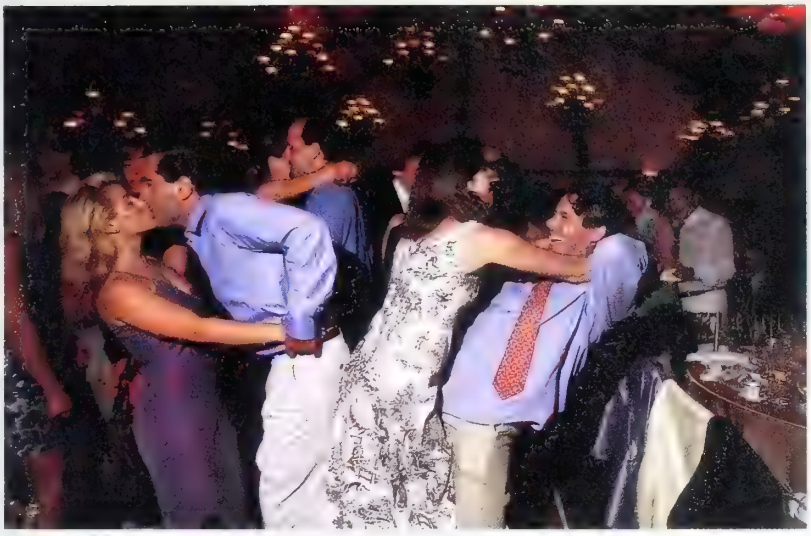
IGIOUS FERVOR. Which is proba- the reason for all that religious or. Not the formal kind, although ing your own spiritual adviser is nd of personal statement among billionaire set these days. Reli- in the Hamptons means repeat- "thank God for Alan Greenspan" very party, every polo game, and y benefit. It's the mantra of ey in this summer of glut.

On the opposite coast, Silicon Valley is also going through its own money madness—with starter houses going for a million bucks. It seems that there are nearly as many money managers in the valley as there are software writers. But nowhere in the U. S. is the excess as palpable and visible as on the streets of East Hampton. Thanks to the bonus bonanza from Wall Street and the media boom in Manhattan, a money-to-burn milieu defines the moment.

And it's not just about the made-to-order tofu fudge and the carrot-tofu birthday cakes—this year's culinary rage. Nor is it only about the 9-year-olds on the tennis court talking on cell phones to Mom doing her Pilates stretches at the gym or the 66,000-square-foot single-family house—even bigger than Bill Gates's domicile—rising out of the potato fields in Sagaponack.

No, the real symbol of this summer's zeitgeist is the servants. Not that they are called that. Little Johnny and Jennifer each has a personal trainer. So do Mommy and Daddy. "My massage therapist," "my nutritionist, "my chiro (chiropractor)." You hear it in restaurants, at the movies, on the streets. "My," "my," "my." It's the service society gone mad.

Yet, all is not perfect in this monied paradise. Beneath the gloss, there is an edginess. "When will it end?" is heard as much as "Is that Martha Stewart?" Meaning, when will the stock market bubble burst? The anxiety shimmers in the hot beach sun. No one actually says it out loud, but the question is always there: If the market goes, how in the world will I pay for that enormous house? The cars? The lessons? The clubs? How will I remain a dues-paying member of the leisure class?



Beneath the gloss, there's an edginess. "When will it end?" is heard as often as "Is that Martha Stewart?"

FESTIVE: A PARRISH MUSEUM BENEFIT IN SOUTHAMPTON

Truth is, no one really believes the party can continue much beyond the hot summer days. They worry that inflation will finally force Greenspan to raise interest rates. Or that the soaring trade deficit will kill the dollar and send foreign capital packing. Or that Asian deflation will take the air out of growth. Any of it, all of it, can send the market down 20%—maybe more. There's a gnawing fear among those whose wealth came in a sudden flash that it can disappear the same way. That makes them jittery, jumping in and out of the market, only to run right back in because the damn Dow doesn't stop rising.

So, the people bravely party on. The extravagant benefits with chandeliers adorning giant tents, the networking, the dancing, the celebrity shoulder-rubbing. It's splendid. It's exciting. It's like that other Long Island party that Gatsby threw in the '20s, waiting to end badly.

Nussbaum, BUSINESS WEEK's Editorial page editor, monitors the leisure class from Amagansett.

ALL DOWNHILL

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Unions have few options to h
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But even the crippling GM action
sign of strength. In fact, most
dare not strike for fear manag

LABOR

UP IN ARMS BUT DOWN IN CLOUT

Behind labor's latest militancy is the offshore threat

General Motors Corp. workers in Flint, Mich., have walked the picket lines for seven weeks. And they angrily pledge to stay out until Labor Day, if necessary—putting their employer billions of dollars into the red. Militant? Most definitely. Powerful? Not really.

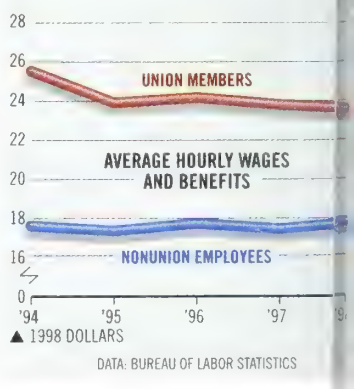
These members of the United Auto Workers are symbols of where much of organized labor stands today. Instead of fighting for higher wages or better benefits, they're battling just to keep their jobs. Despite an eight-year economic expansion that has produced the lowest unemployment rate in two decades, unions still are trying desperately to keep GM and other employers from sending their well-paid union jobs to less expensive nonunion shops in the U.S. and abroad.

The casualty count on the union side is staggering. Take GM. Since 1978, the car company has built more than 50 auto-parts plants in Mexico, where it employs some 72,000 workers. The parts, made south of the border, are then sent to assembly plants, mostly in the U.S. But the practice is hardly confined to companies with contentious labor relations: Even Ford Motor Co. and Chrysler Corp., which have good relations with the UAW, have steadily moved parts jobs to lower-cost suppliers, both inside the U.S. and across the border. Last year, Ford bought $3 billion in parts from Mexico. And the company hopes to raise that by 10% over the next three years.

BIG SHIFT. Nor is outsourcing—shifting work offshore or to nonunion plants—restricted to the auto industry. Since the mid-'90s, the practice has exploded across the manufacturing economy. Companies in industries from apparel to electronics have shifted production to nonunion shops and to Mexico.

The trend began to accelerate with the North American Free Trade Agreement in 1994, which made it easier and cheaper to shift jobs to Mexico. Now, the Asian economic crisis has ratcheted up the pressure: Low-cost imports undercut U.S. factories, pushing management to find cheaper sources of labor. And sagging exports reduce high-wage U.S. manufacturing jobs.

THE WAGE GAP



DATA: BUREAU OF LABOR STATISTICS

outsource work. The number of
s sinks each year, even while union
ags. "The strike today is a defen-
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s," says Thomas A. Kochan, man-
ent professor at the Massachusetts
ute of Technology.
en the most profitable companies
till cutting union jobs. In June,
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l lay off 1,500 members of the In-
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represents 6,400 employees at
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ges $17.50 an hour. Some jobs will
nonunion workers earning $9 an
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thers will be moved to a joint ven-
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ny called Mabe.

IG SOUTH. The wage differentials
great that even huge pay cuts of-
n't save union jobs. For example,
ay 28, Huffy Corp. said it would
ts Celina, Ohio bicycle plant, elim-
g about 1,000 jobs held by USW
ers. Employees there now earn
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a 33% cut workers swallowed to
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w, Huffy plans to move jobs to a
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ts. Huffy also will import bicycles
China. "China has emerged as a
supplier of low-cost bikes, [cut-
prices by 25% over the last four
" says Huffy Chief Financial Offi-
homas A. Frederick. "We couldn't
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ile today's 4.5% jobless rate makes
er for laid-off workers to find oth-
s, union members aren't likely to
the pay of their old ones. De-
labor's dwindling power, union
remain a third higher than
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ecause the number of union jobs
country isn't growing, the likeli-
f finding one is slim. "Most com-
start you out low and then in-
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" says John Folk, head of USW
5369 at the Huffy plant in Celina.
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id in Flint. And in this case, the
rs have a better chance of gaining
concessions from GM. But that
turn the tide: The most any union
pe for is to slow, not stop, the
res leading manufacturers to look
eaper labor elsewhere.

Aaron Bernstein in Washington

THE GLOBAL ECONOMY

WHY MEXICO SCARES THE UAW

Auto makers are increasingly drawn to its high-tech skills

Arturo Tovar is a man with ambition. The 28-year-old assembly line supervisor earns $10 a day—before bonuses and benefits—overseeing 20 men at Rassini Autopartes' state-of-the-art suspension component plant in Piedras Negras, a desert town on the U.S. border. Part of Mexico's Sanluis Corporación, the plant provides auto and truck suspension systems to Detroit's Big Three and other auto makers. Tovar, who started seven years ago as a line worker, has improved his standard of living, moving up from a plywood shack to a two-bedroom cinderblock house. "I can't complain," he says.

Tovar and other hard-driving workers in Mexico's booming auto-parts industry are part of the United Auto Workers' worst nightmare. As workers at General Motors Corp. in the U.S. battle furiously against possible plant closings, Mexico-based auto-parts makers are vastly expanding their capacity—both in terms of new plants and new skills. No longer do Mexican workers merely produce low-tech parts such as wire harnesses and seat covers. Now, dozens of new plants churn out higher-tech components such as airbags, brake systems, and instrument panels for major auto makers in the U.S., Europe, and Japan. And Mexican engineers, skilled but paid a fraction of what U.S. counterparts earn, design and test transmissions, brakes, and engines at state-of-the-art facilities, such as GM's Delphi Division technical center in Juarez.

While auto investment has been flowing to Mexico for years, it is this new sophistication and increasing integration, from parts up to R&D and assembly, that worries union chiefs up north these days. Mexico now exports $19.2 billion in autos and auto parts—up stunningly from only $7.2 billion only five years ago. It employs 360,000 workers. And it already exports close to 1 million vehicles, almost all to the U.S.

The latest Mexican surge flows from the North American Free Trade Agreement (NAFTA), which phases out tariffs on autos and auto parts between North American trade partners. The rates have already dropped, from 20% before NAFTA passed in 1994, to 6%. They're supposed to end in 2004.

That shift has encouraged the Big Three to move ever bigger chunks of their car and truck operations to Mexico. And it has spurred both local and foreign companies to invest hundreds of millions of dollars in Mexico on technology to produce high-quality auto parts to supply the carmakers. "NAFTA [has] accelerated the whole process" of knitting Mexican plants into North American production, says José Manuel Machado, president and CEO of Ford de México.

To accommodate Detroit's growing demand, Mexico's parts manufacturers are investing heavily to increase capacity

GOING SOUTH: *GM's Delphi Division set up this technical center in Juarez*

and improve technology. Sanluis's Rassini unit spent $140 million to expand its suspension-component and brake-system production last year. Much of that went into the new Piedras Negras plant. Rassini's exports climbed from $67 million in 1993 to $157 million last year, and the company expects to boost its share of the North American market for some suspension components from 40% now to 65% by 2000. Meanwhile, Nemak, the auto-parts division of Mexico's Alfa, will spend $143 million by 2000 to become the world's largest producer of aluminum cylinder heads.

To stay competitive, some Mexican producers are finding U.S. partners. Spicer, which is 51% owned by Mexico's Desc and 49% by Toledo, Ohio-based Dana Corp., is racing to modernize its 32-year-old axle plant outside Mexico City, installing robots and automated production lines. The plant, which designs and produces axles for light trucks, faces tough competition from its main U.S. rival, American Axle & Manufacturing, a former GM operation that was sold to entrepreneurs. American Axle is opening a new plant in Silao, Mexico, at the doorstep of a GM plant that assembles Chevy Suburbans for export to the U.S.

NAFTA EFFECT. To meet local-content demands under NAFTA, European and Japanese auto-parts suppliers are flooding in, too. Under the trade agreement, by 2004 all autos and trucks must have 62.5% North American content to enjoy duty-free status in the region. So, Nissan and Volkswagen, both of which have big operations in Mexico, have convinced many of their suppliers to set up operations around their plants in Puebla and Aguascalientes. Altogether, analysts expect up to $4.5 billion in new investment over the next two years.

Mexico is also producing more finished products—including more models for the Big Three. In 1991, Mexico lifted restrictions on auto imports. Now, many sport utility vehicles and midsize cars are assembled in Mexico, while minivans and luxury cars are produced in the U.S. and Canada. Analysts predict that Mexico's auto production could reach 2.2 million vehicles by 2001, up from an estimated 1.5 million in 1998.

All this bodes poorly for efforts by the UAW and and other unions to keep jobs in the U.S. As auto makers keep pushing to improve competitiveness, Mexican workers like Arturo Tovar must figure heavily into their plans.

By Geri Smith in Mexico City and Elisabeth Malkin in Piedras Negras

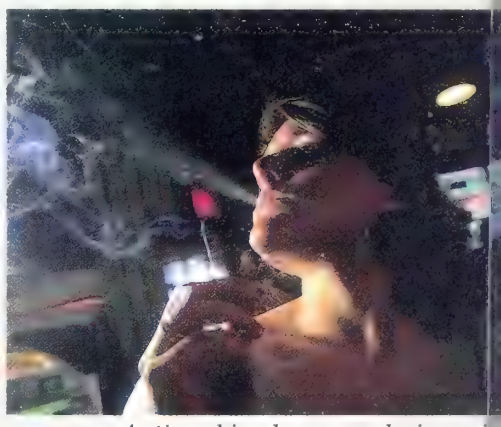
COMMENTARY

By Paul Raeburn

SECONDHAND SMOKE: IT'S DEADLY. PERIOD.

On July 17, in the heart of tobacco country, U.S. District Court Judge William L. Osteen Sr. threw out a pivotal 1993 study by the Environmental Protection Agency linking secondhand smoke to cancer. Although the Greensboro (N.C.) jurist claimed no particular scientific background, he took the unusual step of pronouncing judgment on the report's science—and found it lacking.

"EPA disregarded information and made findings on selective information," Osteen wrote. "The court is faced with the ugly possibility that EPA adopted a methodology for each chapter, without explanation, based on the outcome sought..." The opinion was a near-perfect echo of arguments made by tobacco companies in thousands of pages of comment to the EPA and contradicts the findings of EPA's independent Science Advisory Board.



CLOUDED: *Antismoking laws may be in peri*

The EPA hasn't decided whether to appeal. But if the ruling stands, will smoking be cheerily welcomed back into restaurants and offices? Will suits over secondhand smoke be crushed underfoot like the smoldering butt of a Marlboro?

Let's hope not. The EPA study is now only one of hundreds of scientific reports on the hazards of secondhand smoke. Nearly all of them, including the most recent, confirm the EPA's findings—and go beyond it. Among the most comprehensive is a 1997 study by California's Environmental Protection Agency. While the U.S. EPA report dealt with lung cancer, the California document took a broader look. Among its frightening conclusions: Each year in the U.S., secondhand smoke causes up to 2,700 cases of sudden infant death syndrome, 62,000 deaths from heart disease, and 26,000 new cases of asthma in kids.

What's more, industry documents have since come to light showing that the industry had firsthand knowledge of secondhand smoke's dangers. In 1970s, industry researchers found carcinogens called nitrosamines—i particular one called NNK—"were t most significant risk in lung cancer both among smokers and among n smokers subjected to sidestream smoke," said William A. Farone, d tor of applied research at Philip M ris Cos. from 1976 to 1984. Farone now CEO of Applied Power Concep Inc., a biotech company in Irvine, Calif., and an expert witness for p tiffs challenging the tobacco indus In a memo for plaintiffs' lawyers, noted the industry knew how to e nate NNK by the late 1980s but in stead turned to research on how t make secondhand smoke smell be

Even so, the industry "will use [Osteen's] decision fraudulently to mount an all-out assault against p and workplace smoking restrictio says Clifford Douglas, president o bacco Control Law and Policy Co sulting in Ann Arbor, Mich. In a statement, Philip Morris said the ing "supports our view that...the actment of severe smoking restri tions is not justified." But rescind such laws would be unfortunate. While Osteen's authority as a jud gives him the power to throw out EPA report, it doesn't give ohenrh the power to change the facts.

Raeburn is BUSINESS WEEK's sci editor for science and technology.

FULL LOAD

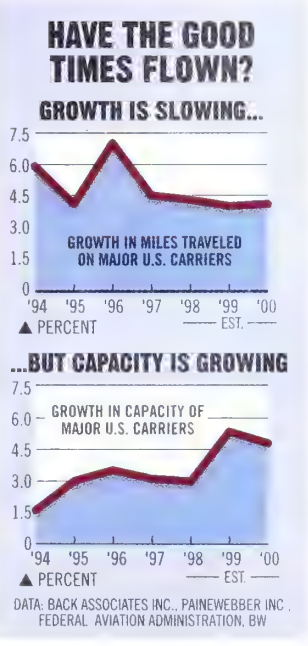
Capacity will grow, but less than in past boom times

its rivals have cut back schedules in many of their Pacific markets. But a new bilateral pact with Japan has limited their options: If airlines don't add new routes now, they lose the right to fly them in the future. Latin America is no party either. Forecasts of growth in gross domestic product have come down in both Argentina and Brazil—but carriers, fighting for market share, boosted capacity by 15% in the region last quarter, says Salomon Smith Barney analyst Brian Harris.

"BANNER YEAR IN 1999." Business in Europe remains healthy, but capacity in the area is growing quickly, partly because airline carriers are bringing in planes they had been using for flights to and from Asia. Northwest shifted a Boeing 747 from its Osaka-Honolulu route to its Detroit-Amsterdam route and plans to boost its capacity to Europe by 30% this year. "The consumers may see the return of some real bargains," says Michael E. Levine, a Northwest executive vice-president.

What happens in the domestic market? For four years, demand for flights has grown almost twice as fast as supply, according to BACK Associates, an aviation data firm. That has airline carriers shopping for capacity—but very conservatively. They plan to add just 3% more domestic capacity annually for the next three years. "Under most reasonable scenarios, the industry ends up with a banner year in 1999," says Buttrick, "but only the second-best year in its history." If he's wrong—and carriers suddenly must scramble to fill half-empty planes—you can look forward to some very cheap end-of-millennium jaunts.

By David Leonhardt in Chicago, with Wendy Zellner in Dallas, Lorraine Woellert in Washington, and bureau reports



INES

IR TESTOSTERONE LEVELS E PRETTY LOW'

nce, U.S. airlines are resisting the urge to splurge

can practically set your clock by Just as an economic expansion urts to peak, airlines, attempting p up with fast-spending con-s, order a slew of new planes. he inevitable slowdown comes, ey're left with empty seats and g bottom lines.

ı that painful scenario in mind, ors have been dumping airline despite record quarterly earn-MR Corp. had it worst: After an-ıg on July 15 that second-quarter had jumped 35%, to $409 mil-s shares slid 17% in three days. re is reason for concern: In 1999, e first time in six years, the ı in the number of airplane seats y to outpace traffic growth, ana-ay. Meanwhile, Asian economies the tank, Latin American coun-re beginning to suffer, and some ılists are now talking about a pos-'. S. recession in 1999.

BISHING. Industry executives in-at this time around they're not into the red, though—and they e right. With planes fuller than ıd airline profit margins running what they were at the last peak, s may be able to take on more without flying half-empty. And ın the number of planes that are r, capacity will grow by less than r year over the next three -well below the high of 10% in 0s. "Five percent used to be the e," says PaineWebber Inc. airline analyst Samuel C. Buttrick. "Now it's the peak."

Could it be that the airline industry, never known for restraint, is resisting the urge for a boom-time splurge? Maybe. United Airlines Inc., for example, has opted not to replace 75 aging Boeing 727s, even though it could lower costs and boost profits by doing so, says Chief Financial Officer Douglas A. Hacker. Instead, it will refurbish the old aircraft. Why? If a recession comes, United could retire the planes without having paid for new aircraft. Similarly, Continental Airlines Inc. has been expanding aggressively, building up its hubs in Houston and Newark. But President Gregory D. Brenneman says that the company has left itself with plenty of flexibility to retire planes. "Our testosterone levels are pretty low," he says. "We just want to make money."

The airlines might still hit a wind pocket, most likely on international routes. In Asia, Northwest Airlines Inc. and United—the leading players to the Pacific—saw about $200 million in second-quarter revenues disappear. Northwest and

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In Business This Week

EDITED BY KELLEY HOLLAND

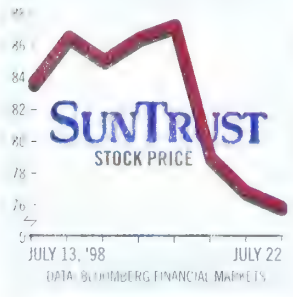
A NEW DOORWAY AT AOL

EN GARDE: AMERICA ONLINE is ready to go head-to-head with high-flying Yahoo! and Excite in the Internet "portals" business. In September, the online giant will turn its recently acquired ICQ instant-messaging service into an Internet portal similar to those run by the Internet search and directory companies—by adding content and search features to its chat service. With seven million active users, ICQ (short for "I seek you") is quickly gaining ground among the young and tech-savvy, as opposed to AOL's more mainstream members. ICQ will retain its brand to keep attracting those users. Eventually, AOL wants to market Internet telephony and videoconferencing to them, but for now will refrain from overcommercializing ICQ with ads and E-commerce deals.

CLOSING BELL

LOSING ITS GLOW

SunTrust Banks says its $8.6 billion purchase of Crestar Financial, announced on July 20, meets all its tests for a solid acquisition. But Wall Street disagrees. Under former Chairman Jimmy Williams, SunTrust sat on a hoard of Coca-Cola stock and shunned acquisitions. Investors, hoping SunTrust would be snapped up, bid up its shares. When SunTrust became a buyer, they bolted. Analysts say the deal might help SunTrust survive—but in the long run, might make it a more attractive target.



LOOKING DOWN ON THE DUMPS

THE COMMERCE DEPT. HAS slapped antidumping penalties of 3% to 34% on imports of stainless-steel wire rod from Germany, Italy, Japan, Korea, Spain, Sweden, and Taiwan. But before the duties are levied, the U.S. International Trade Commission must decide if the industry has been harmed. A ruling is expected in September. Meanwhile, Asia's crisis could produce even more complaints as currency devaluations lower import prices, says Greg Mastel, vice-president of the Economic Strategy Institute.

GATES PASSES THE BALL TO BALLMER

LOOKS AS IF BILL GATES IS really a nerd after all. On July 21, Microsoft's chairman and CEO elevated his sidekick, Steve Ballmer, to president so Gates can focus on product strategy. "We're only one-quarter of the way along in achieving what's possible," says Gates. "I want to work with our developers to simplify the user interface, create computing tablets and intelligent TVs." Operating units, legal, product development, and sales managers will report to Ballmer. Top priority: to make sure Microsoft doesn't get "big-company problems," he says.

INTEL ACCELERATES THE CELERON

THE MARCH OF THE SUB-$1,000 PC continues, and Intel wants to lead the parade. The company will advance delivery of a new Celeron chip aimed at cheap PCs by one quarter, to August. That could help it win back share from Advanced Micro Devices and National Semiconductor. AMD and National supplied 67% of the processors used in sub-$1,000 PCs sold in June through dealers, says researcher PC Data. The chip will replace the original Celeron, which was panned by techies, and will sell for $150 to $200. One boost for Intel: IBM is considering using the new Celeron instead of AMD's K6 in some Aptiva PCs.

JETT IS CLEARED OF SECURITIES FRAUD

THE 1994 BOND-TRADING scandal that ended the career of Joseph Jett at Kidder Peabody culminated in a surprising verdict on July 21. A Securities & Exchange Commission administrative law judge found that the fo Kidder government- chief created $350 milli illusory profits by mani ing Kidder's accountin tem. But Judge Carol F found Jett guilty on record-keeping violatio cleared him of the secu fraud charge sought b SEC. Foelak ordered tha be barred from the ind for life and required t gorge $8.2 million in bo Jett's attorney promis appeal.

HEADLINER: ALAN SHUGART

DON'T SLAM THE DOOR ON YOUR WAY OU

The end of Alan Shugart's reign at Seagate Technology was a shock. He was told of his ouster by Larry Sonsini, an old friend and adviser to Seagate's board on a Saturday afternoon. "The only thing I could get out of them was that it was time for a change and that it was time for me to retire," says Shugart, 67. "I think it's unadulterated B.S., but I'm not allowed to say bad things about them."

Co-chairman Larry Perlman insists the board tried to work out a smooth departure for two years. Seagate has struggled of late. Its share in high-end drives has dropped from 80% to 40% since early 1997. An Seagate's 1996 purchase Conner Peripherals, a maker of low-end drives, didn't pa off. Shugart w be replaced b Stephen Luc 40, a former vestment ban Shugart hired 1993.

Shugart had ma progress, though, reporti a $25 million profit in the June quarter. Indeed, Lu says there'll be no major shift in strategy, but he'l probably revamp manag ment. Says a rival: "He'l surrounded with people Al took very good care think more shoes will dr

By Peter Bur

ET CETERA . . .

- As Fleming's sale stock slide, CEO R Stauth is retiring.
- IBM consumer-divisio Jim Firestone is leavi Xerox.
- President Clinton s the Internal Revenue vice reform bill.
- By 264 to 166, the approved continuing r trade relations with Ci

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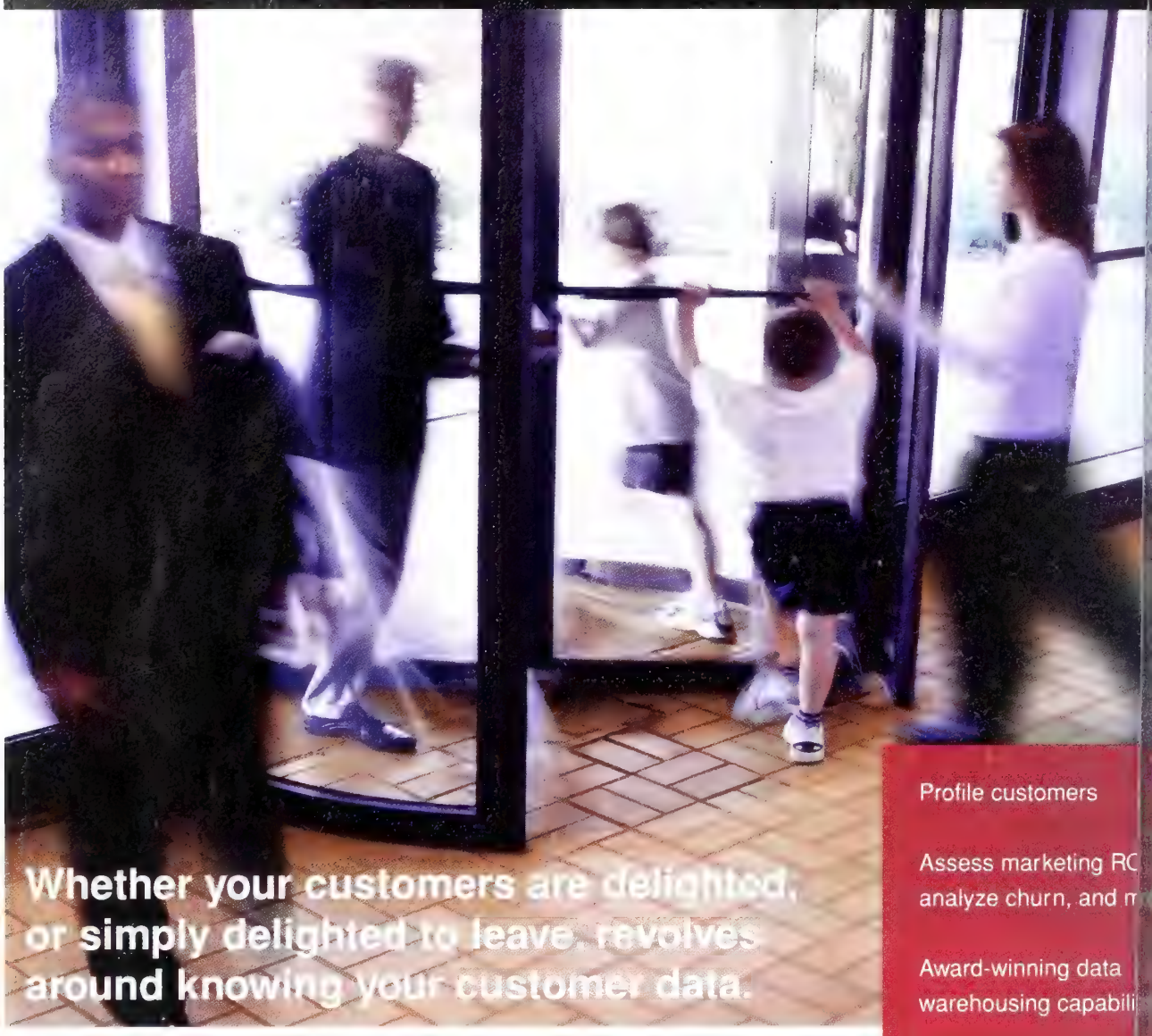

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TED BY OWEN ULLMANN

ANCTIONS AGAINST CUBA: HE BEGINNING OF THE END?

n the surface, the U.S. embargo on Fidel Castro's retro-Marxist regime in Havana seems as tight as ever. The Senate voted on July 15 to exempt humanitarian aid from trade sanctions—but kept in place the heavy restrictions d imposed on Cuba and other nations accused of backing rism. Senate Foreign Relations Committee Chairman Helms (R-N.C.) crowed that the vote was a "resounding rmation" of U.S. efforts to isolate Cuba.

it U.S. business execs are betting that after nearly 40 , the economic freeze may finally melt. January, when Pope John Paul II called fting the embargo, companies have seen ul signs. The Clinton Administration has small steps to ease up on Havana. Con- ional votes to lift food and medicine export on India and Pakistan point to growing chantment with all unilateral sanctions. Capitol Hill's anti-Castro fervor may be ng as Cuban-American support for the rgo erodes. "There's a lot of motion on ssue," says Kirby Jones, head of Alamar iates, a Washington consulting firm that a U.S.-Cuba business summit in March lans another in September.

NA SHOWS. Corporate interest has soared wake of the Pope's visit. Some 40 major anies attended Alamar's spring meeting, ling Mobil, Texaco, Caterpillar, Continen- ain, and Bristol-Myers Squibb. Overall visits to Cuba by business reps this year are expected to jump to 2,500 500 in 1994 and 2,000 last year, says John S. Kavulich II, lent of the U.S.-Cuba Trade & Economic Council. And January, P.W.N. Exhibicon International of Westport, , which held trade exhibitions in Russia in the 1970s China in the '80s, hopes to be ahead of the curve again a medical industry trade show in Havana.

e White House is trying to expand exports under current law to pave the way for ending the embargo. One example: medical supplies, which are now permitted with special licenses and monitoring. In a private letter in June, the Commerce Dept. said it would look favorably on applications to export experimental drugs for testing in Cuban labs. SmithKline Beecham is expected to receive approval soon for a U.S. unit to test a meningitis B vaccine developed in Cuba. The industry hopes cumbersome export rules "are going to go away or be significantly simplified," says W. Bradford Gary, a vice-president at medical-device maker Allergan Inc.

PAPAL VISIT: *Hope for a thaw*

"A FRESH LOOK." Lawmakers are starting to heed the growing pressure from business. Some 130 House members and 30 senators are cosponsoring measures to take food and medical products off the embargo. Says Senator Christopher J. Dodd (D-Conn.): "People on both sides of the aisle are willing to take a fresh look at Cuba." The bills have the backing of a Chamber of Commerce-sponsored group called Americans for Humanitarian Trade with Cuba, which includes such luminaries as former Federal Reserve Chairman Paul A. Volcker.

The fate of the bills depends on how fast the pro-embargo feeling among Cuban Americans fades. Dario Moreno, a Florida International University political science professor, believes support for the embargo has dropped from 80% before the Pope's visit to 65% and keeps dwindling. If that number shrinks further, President Clinton would likely take new steps, such as lifting travel restrictions for U.S. tourists. That's a top business goal.

A high White House official says the business campaign to lift the embargo would get a boost if Castro were to make a move toward political liberalization. Corporate reps can't do much about that. But working with the Clintonites, they may see sanctions on Havana lifted sooner than once seemed possible.

By Stan Crock

CAPITAL WRAPUP

IEY'S LOSING BATTLE

espite vows by House Majority der Richard K. Armey (R-Tex.) to k Congress from giving an addi- al $18 billion to the International etary Fund, the money is expect- o squeak through. House conserv- es are cheering on Armey's cru- to limit IMF funding to $3.4 on. But not all GOP lawmakers feel ngly about the issue. With Corpo- America and the Senate firmly in ort of the full $18 billion increase, ey's army is outnumbered.

BUSINESS SECRETS FOR SPIES

▶ The CIA avoids industrial espionage, but it's trying to learn one corporate secret: how to manage better. The agency has brought in high-powered corporate executives to inspire the troops. The latest: John P. DeJoria, head of John Paul Mitchell Systems Inc., a hair-products concern. He gave a July 20 spiel on time management, motivation, and coping with change—an issue that has been a special problem for the CIA in the post-cold war era.

A NEW COPYRIGHT LAW?

▶ After a year of wrangling, Congress may soon pass legislation to improve protection of copyrighted digital works. Producers of DVD movies, sound recordings, and software had been pushing for a ban on devices that circumvent the technologies in their products designed to prevent piracy. On July 17, the House Commerce Committee approved a bill, but turf battles with the Judiciary Committee could stall a House vote. The Senate has passed similar legislation.

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INDONESIA

THE PLIGHT OF THE ETHNIC CHINESE

Many have fled the violence, and the economy will be hard hit

Veronica Suryati Tanujaya, 35, used to be a shop owner. As one of hundreds of thousands of general store merchants, she helped form a cornerstone of the Indonesian economy that has kept the archipelago running on credit since the 17th century. Her family, emigrants from China, founded the store in a small subdistrict of West Java three generations ago. She knew all the local farmers and how much credit to give each one for kerosene, rice, and cooking oil until harvest time.

In February, in the midst of the most turbulent months of Indonesian history since 1965, the farmers started rioting and burned down all 17 ethnic Chinese-owned stores in the area, including Tanujaya's. She escaped with her husband, throwing her 9-year-old son out the back window into a stream 24 feet below and plunging after him. They survived but lost everything. Now a refugee in Jakarta who sells chicken satay and fried rice to survive, Tanujaya laments the lack of sufficient money to allow her family to emigrate. "We're very afraid to stay," she says. "If we had the chance, we would leave Indonesia."

From Indonesian Chinese tycoons to simple merchants such as Tanujaya, the community has been marked by the violence and persecution that characterized the end of the Suharto era. Their experience triggered the flight of 100,000 ethnic Chinese from the country. While many have come back, all of Indonesia's Chinese community are asking what comes next. If the ethnic Chinese are convinced that Indonesia can guarantee them safety and justice, they could aid the country's recovery by bringing their capital back from abroad and apply their talents to reconstruction. If they feel threatened by renewed violence, many more could flee.

BACKBONE. The impact of a mass e dus of the ethnic Chinese could b astating. Ethnic Chinese run In sia's largest conglomerates. They the backbone of the professional They run thousands of small fa that make everything from sh auto parts. They own the nation's that double as agencies to farme laborers. Practically tiny town has an Chinese-run genera that is the center cal economic life.

Already, the flig ethnic Chinese capi contributed to th lapse of the econo though not all of it nic Chinese, som billion is believed left Indonesia sin turmoil began, wi haps $60 billion

THE ETHNIC CHINESE AND THE INDONESIAN ECONOMY

WHO ARE THEY? The Indonesian Chinese arrived centuries ago as traders and merchants. Today, they number about seven million, some 3.5% of the Indonesian population.

WHY ARE THEY IMPORTANT? The ethnic Chinese control about two-thirds of the country's economy. They dominate retailing, banking, and much manufacturing. Local Chinese shopkeepers provide essential credit to farmers.

WHAT'S HAPPENING TO THEM? Thousands have fled the country since the May riots, taking brainpower and billions in capital with them. Their absence is crippling investment, decimating the professional class, and threatening the economy.

DATA: BUSINESS WEEK

AFTERMATH

In Jakarta, shop owners try to salvage something from the ruins of their torched stores

Singapore. Thousands of profes- s have fled to Singapore, Malaysia, and, New Zealand, and the U. S. Indonesia's 7 million ethnic Chi- make up just 3.5% of the popula- as much as two-thirds of the coun- otal economy passes through their in the form of products, goods, l, and services. The destruction of Chinese-run general stores on the of Java alone has created such ty that prices are skyrocketing tomachs are grumbling.

e resentment toward ethnic Chi- nas strong roots. It stems in part cultural and religious differences— Indonesians are Muslims, while Chinese are Christians or Bud- . And it derives from the domi- role the Chinese have played in conomy for centuries. Fostered by the favorable policies of pre- governments, including Suharto's, ormous wealth gap has grown be- the ethnic Chinese and native esians, or *pribumi*. When economic are good, prosperity smooths the ons. But periodically violence s, such as in 1965 when thousands of ethnic Chinese were killed in the aftermath of a failed Communist coup. Times are anything but good now, and the Chinese fear another explosion.

Sporadic harassment of ethnic Chinese—including attacks, rapes, and verbal threats—is continuing in Indonesia. Many ethnic Chinese feel the government is doing precious little to stop it. They point to alleged government or military involvement in escalating the attacks on ethnic Chinese from spontaneous food riots to the organized arson, looting, and gang rapes that occurred in mid-May.

On May 14, trucks loaded with muscular men raced to shopping centers and housing projects owned by ethnic Chinese. They doused the shops and houses with gasoline and set off devastating fires. At least 182 women were raped or sexually tortured, some of them repeatedly, by men with crewcuts whom the victims believe to be soldiers. At least 20 women are confirmed to have died as a result of the brutality.

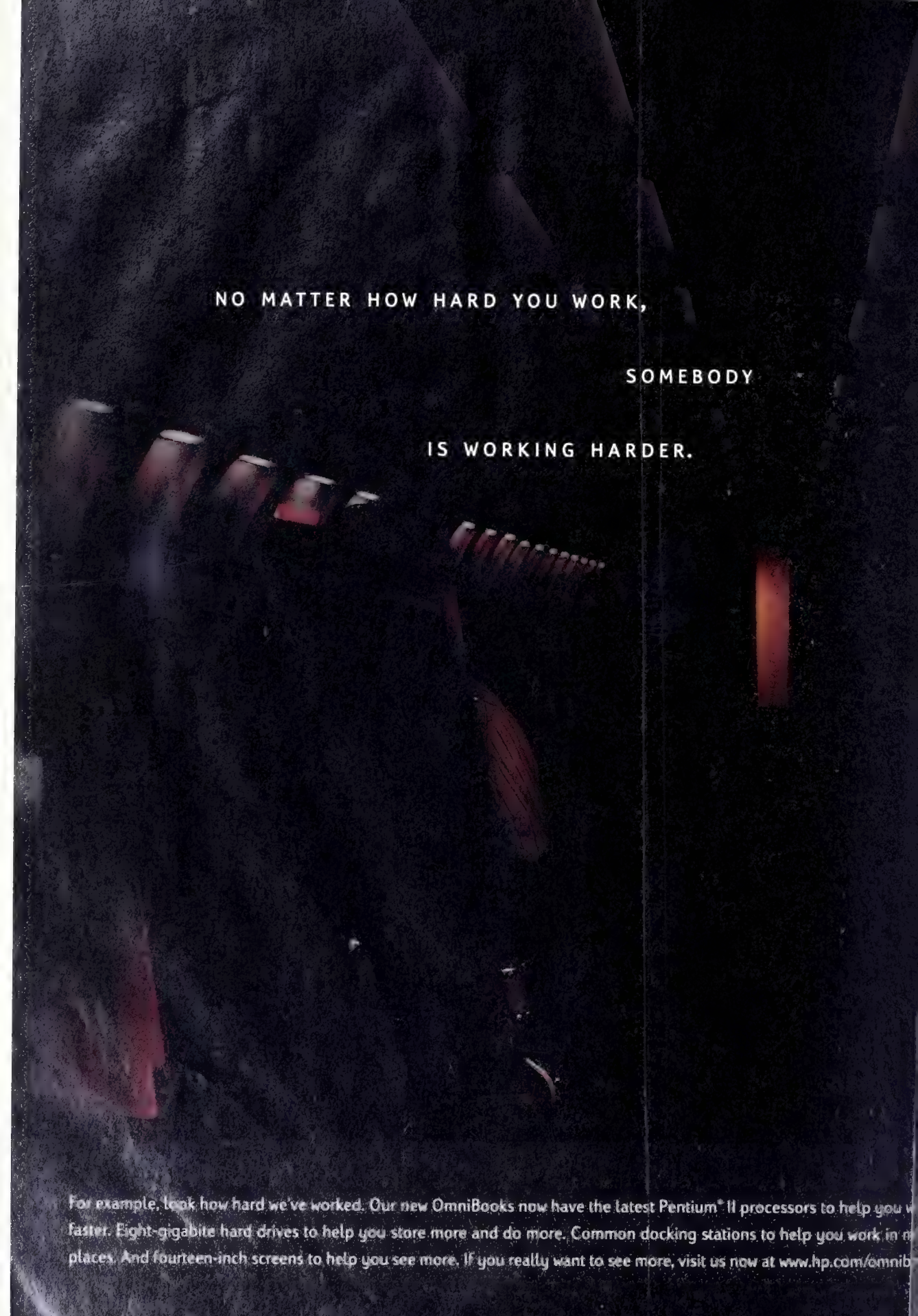
Since then, some Chinese families in Jakarta have had their front doors marked with red or black paint in the middle of the night—color codes they are told stand for "loot and burn" and "rape and kill." Sandyawan Sumardi, a Jesuit priest who confirmed the rape cases in a report to the Indonesian National Commission on Human Rights, found a hand grenade in front of his office. The secretary of a Jakarta CEO tells of an experience common to other ethnic Chinese women: After a taxi ride home in late June, she was told by the driver: "I was paid to rape you, but I won't this time. Don't take any more taxis."

FEAR REIGNS. In addition, nine ghastly photographs of naked women being tortured by men in camouflage uniforms are now circulating on the Internet. Their bodies were carved with the words, "Don't be stupid." Diplomats and human rights workers say the pictures may be fakes, but they illustrate the fear and tension that reign. Sukang Prasetio, 31, head of the legal department of a Jakarta company, was undecided about whether to leave until he saw the Internet pictures. A few days later, Prasetio, the father of a 6-month-old girl, quit his job and prepared to leave for New Zealand. He will consider coming back "only after the election next year, and only if we see a good government, not like the one now in power."

With such sentiments common in the Indonesian-Chinese community, major Indonesian companies complain that their management ranks are thinning. Peter Gontha, CEO of media conglomerate Datacom, was gratified to see two of his directors who had fled to Singapore in May return—until he found they were only organizing a final exit. Sofjan Wanandi, chairman of the Gemala Group, has lost five directors, and has 25 applications on his desk from Chinese-Indonesians who want to work for Gemala's overseas units, including a trailer plant in Arkansas.

Ethnic Chinese professionals from around the region hesitate to return. Singaporean investment banker Tan Yong Seng turned down an offer to to be chief financial officer for a Jakarta company because he is afraid for his wife and two kids. "You're talking about risking your life," says Tan, 42, who used to work for Deutsche Morgan Grenfell Inc. in Jakarta and has no intention of going back. "I decided not to take the risk."

Many young, well-educated ethnic Chinese women are determined to



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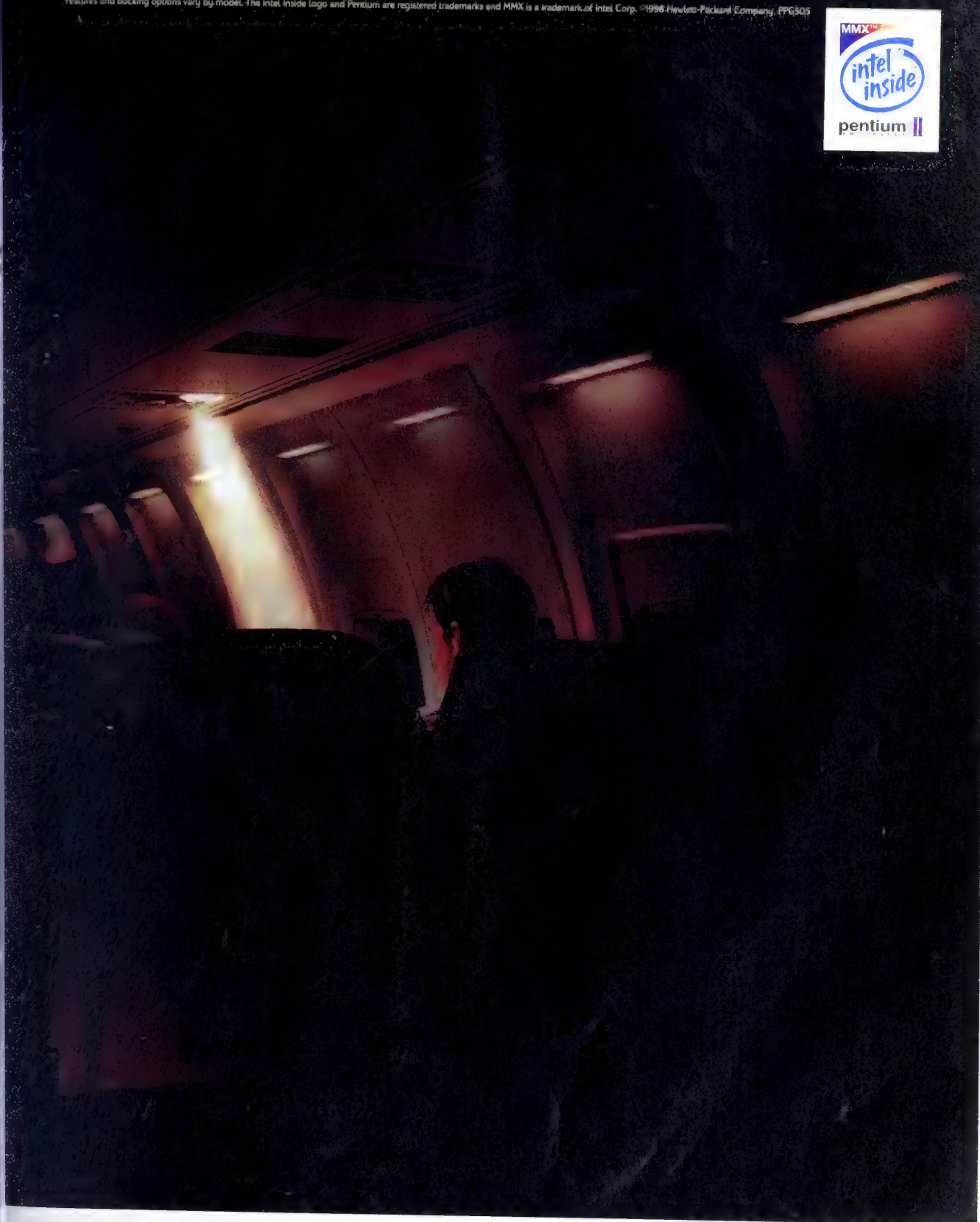

HEWLETT PACKARD

Expanding Possibilities

leave. They earned degrees abroad and were recruited by brokerages eight years ago to help get the Jakarta stock market off the ground. Now, they want out. A stock analyst whose company recently closed down is shunning Jakarta job offers. On the night of May 15, rioters pelted her window with rocks and set fire to cars on the street below. "I was inside, by myself, crying, sleeping with my sneakers on, a wallet, my handphone, and a golf club by my bed," she recalls.

The brain drain is also reaching into the intelligentsia. Well-known ethnic Chinese political scientist Christianto Wibisono fled to Portland, Ore., with his daughter and 4-month-old granddaughter. On May 15, men dressed as private security guards herded his daughter along with hundreds of other residents of a luxury housing com onto a golf course. The resid watched helplessly as a mob bu down their houses and gang-raped of the women. It was "a marriag convenience between latent racist es and *agents provocateurs*," Wibisono. His daughter was not ha but four neighbors were so bru raped that they needed treat

HABIBIE: 'YOU KNOW, I'M NOT GOD'

Indonesian President B.J. Habibie faces monumental problems. The economy is contracting by 15%, while unemployment is skyrocketing. His detractors claim he's too closely linked to former President Suharto, and that he's not doing enough to reassure the ethnic Chinese. In an interview with BUSINESS WEEK*'s Asia Regional Editor Joyce Barnathan and Singapore Bureau Manager Michael Shari, Habibie answered his critics. Excerpts follow:*

Q: *How can you ensure the well-being of the ethnic Chinese, who were the targets of recent rapes and rioting?*
A: First of all, what happened is not only a racial or ethnic thing. It is [a result of] the social gap. If you look at income per capita, the Chinese have the highest. I have had talks with the Chinese. One told me: "Look, I have a factory and a house. My company was not burned. The house beside me was." I asked, "Why?" He said: "Because I cooperate with the Indonesians who work with me. I donate to the neighborhood. And they know me."

Q: *Are you saying that the ones who did not give to the community had their homes burned down?*
A: No, I'm not saying that. But I know enough Chinese who are.

Q: *So you are not worried about a brain drain as the Chinese flee?*
A: No, I'm not worried about that.

Q: *Will you repeal laws that discriminate against the Chinese?*
A: I'm now preparing to ratify the U. N. convention on racial discrimination, torture, and human rights.

Q: *Do you think the attacks on the Chinese were planned?*
A: Not by the Indonesian people. I don't know, maybe there are those who want...a social revolution.

Q: *What's your main economic goal?*
A: My first goal is to stop inflation. I have to control the supply of money. I have asked the Minister of Finance not to take rupiah to [recapitalize] the banks from Bank Indonesia (the central bank). My instructions are: Don't print money.

Q: *Has your plan been successful?*
A: I have asked the [central bank] to consider keeping interest rates high for two months. Money will be sucked in by the high interest rates and inflation will go down. I also asked my economic team to produce a balanced budget that should not be based on printing money. Funds from the IMF will help us have a balanced budget. I think we'll see results in September or October. That will happen by doing everything transparently.

Q: *Transparency hasn't been practiced much in the past.*
A: We need transparency i monetary policy—and also with the presidential institu tion. You [journalists] could never talk with the Preside before. What I am doing is just normal.

Q: *So your predecessors' b havior was not normal?*
A: That was their values. me, it was strange. I want t remembered as the first I donesian President who is like you and me. Not a go

Q: *Have you been in touch with former President Suha*
A: I have spoken with him only o birthday. The last time I met Pres dent Suharto was the day that he stepped down.

Q: *What role does Islam play in t government?*
A: We are a [religiously tolerant] ernment. We put belief in God at top. I don't make any difference b tween Islam, Christianity, or Juda Ninety-nine percent of the people here believe in one God. The diffe ence between Muslims and Christ is that Muslims believe that God not a man but that God is a spiri maybe we have more similarities the Jews. Muslims do not eat por I am in the U. S., I just look for Jewish restaurants and I can eat everything.

Q: *Is there any way to reassure ple that the riots will never happ again?*
A: You know, I'm not God. I'm d what's systematically within my pacity as President: making laws taking a different approach. Give time. Give the people time.

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at Singaporean psychiatric wards.

Those who have stayed behind are sending abroad every penny they can. Katherine Susanto, a 16-year-old who is one of 180 new ethnic Chinese students enrolled at the Indonesian school in Singapore, says her father, an optician in Jakarta, changes every rupiah he earns into dollars to cover the $1,000 per month in school fees and living expenses that it costs to keep her and her mother there. "Jakarta is still not a safe place for women," says her mother.

While the government of President B.J. Habibie has taken some steps to induce ethnic Chinese to return, few in the community feel they go far enough. "They need to restore confidence in order to get the contribution of [ethnic Chinese] in rebuilding the nation," says Singaporean banker Tan. "How do you convince a guy with a burned-down house, 'Come back, we need you?'"

Habibie has ordered an investigation of the rapes. But he clearly doesn't want the ethnic Chinese to play as prominent a role in the economy as before. "I think it would be sad if our economy or our future were dependent on one ethnic or racial group," he told BUSINESS WEEK in an interview.

BURNED OUT. Instead, Habibie is rebuilding the distribution system using *pribumi* companies and forcing out Chinese ones. The government has taken away millions of dollars worth of contracts from ethnic Chinese distributors of state-subsidized foods, even though they had remained in the country. The tension is such that sources say Salim Group subsidiary Indofood, which reported losses of $80 million in the first quarter, wants to sell its operations. The company would not comment. Its prominent ethnic Chinese founder Liem Sioe Liong and his son Anthony Salim moved permanently to Singapore after their home was torched by rioters.

It will take years if not generations to repair the damage from the anti-Chinese riots. In the meantime, the ethnic Chinese are arming themselves, buying pistols and rifles in Jakarta shops and on the black market. Some neighborhoods are pooling their money to buy protection. "A guy I know is taking shooting lessons," says Marlina Ng, a 26-year-old financial analyst in Jakarta who fled to New York. "Maybe if we armed ourselves, they'd be scared to do it again." To many Indonesian Chinese, if they can't depend on the government for protection, the only options are to defend themselves—or flee.

By Michael Shari in Jakarta, with Jonathan Moore in Kuala Lumpur

SPAIN

SPAIN'S SUCCES

The economy is fast becoming one of Europe's healthiest

Meta4's name isn't the only clever thing about the seven-year-old software startup. Most of its 550 employees are whiz-kid programmers in their late 20s. Sales at the $23.5 million company doubled last year, and 20% of them are exports. Founder Juan Morán, 39, has banned paper communication at Meta4, insisting on E-mail for speed, and he does his recruiting over the Internet. "In a knowledge-based economy, we can compete very well," says Morán.

The latest high-tech success story in Silicon Valley? No, Meta4 is just outside Madrid—and a prime example of how Spain is racing ahead of European neighbors. Spain's factories are among the most productive on the Continent, its banks among the most profitable. A tier of midsize industrial companies is gaining global muscle. Government-led labor reforms are creating a flexible workforce. And a new generation of managers is promoting innovation and developing intellectual capital. All this has positioned Spain to be a winn[er] in single-currency Europe, whose [eco]nomies will have to compete for jobs and [in]vestment more ferociously than ever befor[e].

With growth approaching 4% [and] inflation at just half that rate, the [Spanish] now benchmark themselves against the U.S. and Britain, rather than [Europe] as they used to. In the past two [years] the country has brewed up 691,0[00] jobs, more than half of all new jobs in the European Union. "Right now, Spain is the shining light of the Euro Union," says Ken Wattret, senior economist at Banque Paribas in Lond[on].

BOLD MOVES. Spain is reaping the benefits of long-term economic reforms started hesitantly and gained confidence in 1986, when it joined the EU. Top corporate tax rates were slashed from 40% to 35%—a big draw for foreign investment. Bold moves by the government of Prime Minister José María Aznar, elected in March, 1996, have accelerated the momentum for change. Aznar has pushed through $1.3 [billion]

nent spending cuts, a flat capital-
ax of 20%, and a freeze on the
of civil servants.
government has also opened key
of the economy to competition,
g telecoms, oil, and gas, and sold
remaining stakes in Telefónica,
wing bank Argentaria, and en-
oup Repsol. Revenues from pri-
ons since 1996 have topped $28
which has helped lower govern-
bt. Last year, in a critical labor
the government made it less
or companies to lay off workers
lled permanent contracts.
ugh the Spanish economy is only
th as big as Germany's, its car
y is No.3 in Europe—behind
y and France. It is ahead of
nd Italy, exporting some 80% of
million autos that it produces
. Agriculture has fallen to 4% of
mestic product—which, at $584
s about the size of Canada's—
ancial services account for 15%
t.

PUMPED-UP MADRID: *The country's muscle is evident in the many new buildings here and in Barcelona*

The transformation has stunned many who doubted that Spain could cast off its free-spending habits and qualify for the new single currency in 1999. Spain easily made the cut this May. Its budget deficit is at 2.6% of GDP—well below the 3% Maastricht Treaty limit. And with the deficit forecast to fall to 2.4% in 1998, Spain fiscally outclasses many of its neighbors to the north.

Lured by labor costs that are less than half of Germany's, foreign multinationals have been a powerful force in Spain's coming of age, spending billions on factories that now rank among the most productive worldwide. German auto maker Opel has invested a total of $4 billion in its Spanish operations and now exports more than 90% of its Spanish production of Corsas and Tigra coupes. "We were the last train in Europe," says Javier Oraa, board member and general manager at Opel España. "Now, we are in one of the leading positions. We want to stay there."

Today's economic success bears little resemblance to the boom of the late 1980s, which led to a resounding bust in 1992. In a growth spurt fueled by government spending and an overvalued peseta, the public deficit soared, inflation hovered between 12% and 13%, and interest rates topped 14%. Spain bit the bullet. Spending cuts, deregulation, and privatization have dominated the government's agenda since 1993. In fact, when it comes to public-sector reform, Spain is at the head of the EU class. The state plans to be out of everything except coal mines by 2001. If it meets that goal, Spain will have outpaced both Germany and France in privatizing state industry.

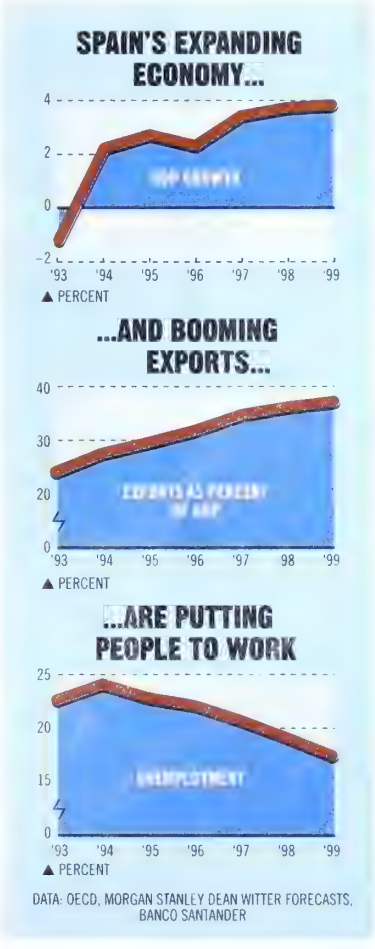
The wave of privatization has given rise to Spain's first true multinationals. Spain is the world's No.1 investor in Latin America and, for the first time last year, a net exporter of capital. Telefónica, fully privatized in 1997, has invested $5.7 billion in Latin America since 1990 and is the region's No.1 telephone operator.

And in banking and finance, Spain has a global edge. Regulatory reform after the collapse of giant Banco Banesto in 1994 turned a cluster of domestic banking midgets into a handful of powerful financial groups. Banco Santander, with $173 billion in assets, ranks 19th in Europe, while rival Banco Bilbao Vizcaya (BBV), with $141 billion, is No.23. Pretax returns on capital are 18% and 22%, respectively—among the highest in Continental Europe. And their clout is growing. "We now have size. We are able to make big investments," says BBV Chairman Emilio Ibarra y Churruca, who is bidding on banks in Brazil, Chile, and Italy.

INFECTIOUS. Spain has much unfinished business. Its economic leap has thrown 3 million people out of work—largely in agriculture. At around 19%, the jobless rate remains stubbornly high, largely because firing workers is still more expensive than anywhere else in Europe. The average cost of laying off employees on permanent contracts—who account for two-thirds of the work force—is two years of full salary. Spain also carries the legacy of a heavy public sector.

But the mood in the private sector could prove infectious. The 30- and 40-year-olds now ruling corporate suites are bent on absorbing the lessons of the U.S. For Spain's young generation, staying among the front-runners in the new Europe is everything. "The feeling is this time we can't be left out," says Javier Loizaga Jiménez, a partner at Madrid's Mercapital Financial Services. The smart money is betting they won't be.

By Gail Edmondson in Madrid, with Margaret Popper in Barcelona and Andy Robinson in Madrid



DATA: OECD, MORGAN STANLEY DEAN WITTER FORECASTS, BANCO SANTANDER

Cover Story

DIVORCE

ROBERT AND VIRA GOLDMAN (right) In a ruling that set a record in New York, she got fully half of the pie–forcing him to sell $44 million worth of stock

Executive Style

Companies are getting dragged into an arena of fierce combat

When Robert I. Goldman, chief executive officer of Congress Financial Corp., filed for divorce from his wife, Vira, in 1996, he had good reason to expect the lion's share of their $100 million estate. After all, even the judge agreed that "Goldman's career was nothort of spectacular." He became CEO of Congress (now a f First Union Corp.) in 1968, five years after his mar- By 1996, he was earning $6.4 million a year and had million in Congress stock. Meanwhile, New York State Walter B. Tolub Jr. observed, "Mrs. Goldman became roverbial housewife." After becoming pregnant in 1966, ays she stopped teaching and spent the next three es raising their daughter Olexa, cooking Robert's meals, ing him into fitting rooms to make sure his suits looked and assembling a $2.5 million collection of antiques to n their townhouse on New York's Sutton Place. "I was for him 200% every step of the way," says Vira.

: if the Goldmans' marriage was traditional, their divorce nything but. In the past, settlements involving the super- enerally favored the spouse earning ost money. That was most often the who could usually count on keeping at two-thirds of the couple's joint as- and sometimes more. But in a stun- Apr. 22 decision, Tolub ruled that Hladun-Goldmann (as she is now ı) was entitled to 50% of the pie, ing $44 million in restricted Con- stock that the company was ob- l to buy back. It was the largest oom divorce award in New York . "In a long-term marriage," Tol- reed, "the distribution of mari- operty should be equal or as o equal as possible."

come to the New Executive e. Powerful cultural, legal, and nic forces are combining to erminating a marriage more ave than ever—especially for anking, well-compensated sspeople. And that, in turn, ding the whole process of e, never pleasant to begin nuch uglier. Husbands are eling their money away in se- aribbean trusts, wives are accusing their exes of abuse, and lawyers are walking off with seven-figure fees.

The new nastiness first gained national attention last year when Lorna Wendt won $20 million from her husband Gary, the CEO of GE Capital. But the Wendt case is part of a much broader revolution affecting executives throughout upper management. For starters, divorce among executives is on the increase, according to a poll by the American Academy of Matrimonial Lawyers—in part because it has lost its stigma among the business elite. And as divorce becomes more prevalent in executive circles, the higher-than-ever stakes and lower-than-ever tactics are increasingly becoming a business issue. When their marriages draw to an end, executives are increasingly facing the prospect of handing their angry spouses large equity stakes in their businesses, sensitive competitive information, and even board seats.

STICKY SITUATIONS. Consider the bitter divorce between cellphone pioneer Craig McCaw and his wife, Wendy, a publicity-shy environmentalist who, according to trial documents, ran up monthly bills of $190,000 to support her lifestyle. During proceedings that began in 1995, a court order severely crimped Craig's business dealings by prohibiting him from making any major sale of his personal assets, then valued at $1.3 billion. Although the restriction was later lifted, he ultimately gave Wendy stock in his companies, Nextel Communications and NextLink, now worth $663 million. She recently flexed her muscle by choosing a Nextlink board member. And now News Corp. Chairman Rupert Murdoch faces a similar possibility. On July 21, his wife, Anna Murdoch, a News Corp. board member, filed for divorce, which could force the tycoon to part with a portion of his controlling stake in the company.

To avoid such sticky situations, more and more boards are being forced these days to think about divorce—once a purely personal issue that rarely arose in business discussions. As stock options, for example, become a more common form of executive compensation, judges are now routinely divvying them up, often dragging companies into court to come up with fair valuations. So companies are

scrambling to protect employees by deferring options and other compensation until after the divorce is final. Other businesses, meanwhile, are drawing up contracts forcing spouses to waive their interests in the mate's business. "I'm talking with corporate lawyers all the time about structuring agreements [to prevent] a company's shares from being taken by a spouse in divorce," says Philadelphia family-law attorney David N. Hofstein.

In spite of all the progress women have made in the workplace, the roles in this drama are still distressingly familiar. Generally, the one who made the big money is the husband and the one who is fighting to get a fair share of it is the wife. But as more women ascend to the executive suite, the proportions are gradually beginning to change. Alice Hector, a high-powered Miami lawyer earning over $300,000, is now fighting over custody of her kids with her ex-husband, Robert Young. Because he stayed at home, a Florida court on June 24 ruled that Young was entitled to primary custody, alimony, and child support. An outraged Hector is appealing the decision. She "never expected that something like this could happen," and is "very concerned" about what it means for working women, says her attorney, Lance A. Harke.

"MEAT GRINDER." For executives of both genders, the agonies of divorce—the trauma of ending a relationship, separating from children, and forging a new personal life—are only heightened by the complications of so much wealth. Former Cadence Designs Systems CEO Joseph Costello, who says he paid $30 million last year to settle his divorce, likens the experience to "being pushed into one end of a meat grinder." At work, CEOs "are used to getting what they want, when they want it, if not yesterday," says Manhattan divorce attorney Leonard G. Florescue. To their shock, in divorce court, their business achievements are valued the same as tasks such as changing diapers, cooking meals, and chauffeuring kids. And their hard-won savings are being divvied up accordingly.

That's proving hard for many CEOs to swallow. By the time Costello married Margaret, a former recruiter for Cadence, in 1989, he was already president of the firm. "I built Cadence—that's my work of art. I didn't build it with her," he says, fuming. After two years of warfare, he ended up giving Margaret their spectacular second home in Carmel, Calif., and 700,000 shares in Cadence, a third of his holdings at the time. "To have a major piece ripped away felt like I was being violated," he complains.

Not a lot of executive wives sympathize. Many were electrified by the highly publicized Wendt case. Lorna's battle for half their estate raised consciousness, much as the Anita Hill case had for victims of sex harassment. Since the Wendt case, women are "taking a much harder stand," reports New York divorce attorney Harriet Newman Cohen. "They're telling me, 'I want to fight like Lorna Wendt fought.'" A new BUSINESS WEEK/Harris Poll of Americans in households earning over $100,000 shows a wide chasm between men and women on this controversial issue. Among women polled, 52% agreed with Lorna's claim that she was entitled to half of the estate, in contrast with 34% of the men (page 62).

Gary Wendt and Joe Costello can blame their troubles on a legal revolution that has been at least two decades in the making. As recently as 1970, most states simply gave property at divorce to the spouse who held title—usually the husband. Even [illegible] long marriage, the wife was often "cut off after divorce," Chicago attorney Michael Minton. "If she was lucky, she g[illegible] house—but usually not enough money to maintain it." W[illegible] generally made out better, though, in the eight so-called c[illegible] munity property states, including California and Texas.

By 1985, women's activism had forced every state to [illegible]

LINDA AND FAYEZ SAROFIM
Details of their divorce settlement were sealed, but not before she aired ugly abuse charges

ELLEN AND GERALD REICH
A rare postnuptial agreement was challenged in court, and their dispute is headed for trial

LORNA AND GARY WENDT
She became the unofficial "poster wife" of high-profile divorces but got far less than what she sought

lling for a more equitable division of estates at divorce. ea was that wives deserved a fair share of the proper- n if everything was in the husband's name. That, of begged the question of what was "fair." In his 1983 *What is a Wife Worth?*, Minton used input from econo- industrial psychologists, and others to calculate the f the work done by an executive wife, assuming the d had to hire e to replace 1985, "we at an after- ıe of $75,000 ear," says , which has een upgrad- 189,000 per But this ap- —which still any high-placed male executive— given way to the view that mar- s "an economic partnership in ıomemakers have as much val- the employed spouse," says Mary sthardt, editor of a journal for ıial lawyers.

ments contend that this premise is wives who have voluntarily sac- heir careers for the good of the Martha L. Fineman, a Columbia University family-law professor who testified for Lorna Wendt and Wendy McCaw, points out that marriage is "a partnership that produces many different things: children, sexual satisfaction, emotional support, a home, and—of course—money." But at divorce, much of what women typically contribute, such as child care, has been consumed. The couple is left with "the economic things," she says. Because courts now see marriage as a shared endeavor, they increasingly rule that the wife deserves half of what's left over, Fineman says.

"DISCARDED IDEA." One of the first cases articulating the new view involved Edson deCastro, co-founder and then-CEO of Data General Corp. Edson argued he was a "genius" whose "unique role in the computer industry" entitled him to most of the couple's Data General stock. It was a brazen argument for a man who, the court found, had years earlier moved out of the house to live with another woman, leaving his wife, Jean, to assume "90% of the responsibility" for the nonfinancial needs of their three children. In 1993, the Massachusetts Supreme Court dismissed his appeal as "a resurrection of the discarded idea that the wage earner is entitled to most, if not all, of the benefits of paid work." It then upheld a ruling that Jean should get half their $17.4 million estate.

To be sure, many executive spouses still win far less than half the pie. Lorna Wendt, the unofficial "poster wife" of the revolution, admits that the $20 million she received in her divorce "is not anything near 50%" of their estate, and she's appealing for a full 50%.

In addition to dividing property more equally, courts are also steadily expanding the pot to include new types of assets. Many, for example, have been targeting stock options—often the bulk of an executive's wealth. Thanks to the growing practice of compensating top execs with stock and the roaring bull market, the CEOs of 180 of the nation's largest public companies held an average of $28.7 million in their company's options at the end of 1997, according to the compensation firm Pearl Meyer & Partners.

Until the mid-1980s, stock options were not even considered property subject to distribution in most states. But now, virtually every state considers vested options marital property. And the courts increasingly are going after unvested options that have been granted during the marriage but are not yet exercisable at the time of divorce. Why? Because as long as the

WHOSE BUSINESS IS IT?

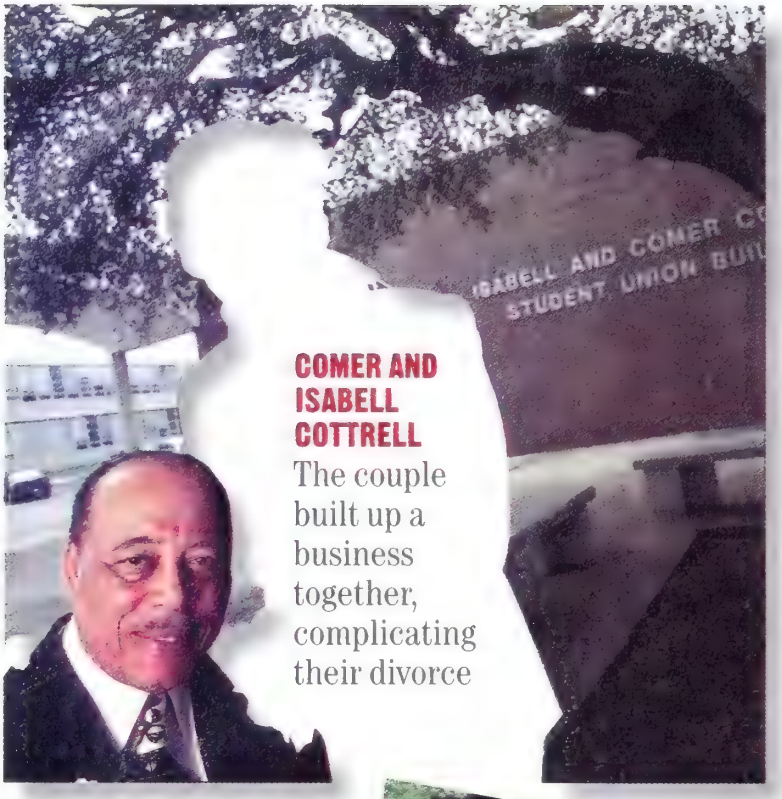
Four men in the thick of the fray

CRAIG McCAW
A court order restricted his business dealings

JOSEPH COSTELLO
His ex-wife won one-third of his company stock

EDSON DECASTRO
In '93, he lost a bid to hang on to most of his Data General stock

RUPERT MURDOCH
His wife is a board member, making things doubly sticky



COMER AND ISABELL COTTRELL
The couple built up a business together, complicating their divorce

options were granted for work done during marriage, they are just as much a form of "marital property" as other income.

This has opened a Pandora's box for divorcing executives and their companies. Since New York and other states have held that options are "marital property" insofar as they were granted for past services, rather than as a future incentive, divorce courts must now grill companies on the strategic thinking behind their benefits plans as well as on what the options might be worth. This frequently forces corporate employees to testify in divorce court. Moreover, it is virtually impossible to place an accurate value on unvested options. If the stock falls, they might prove worthless. But that hasn't stopped courts from valuing them, albeit with varying results.

Judge Edward Jordan in Cook County, Ill., argues that the fairest approach is simply to set the options aside until they mature. But in the Wendt case, the judge concluded this would create too much potential for "continued strife and hostility." Instead, he devised a complex formula for valuing Gary's GE options, then ordered him to pay Lorna half that amount.

Another dicey problem that's arising more frequently: when husband and wife have built a business together. That's the central issue in the pending divorce trial of Isabell and Comer Cottrell. When Isabell met Comer in 1975, he was the owner of a fledgling ethnic hair-care products company, Pro-Line Corp., now based in Dallas. The following year, Isabell says, she joined the company, and in 1977, they were married. Over time, thanks to products such as hair relaxers, Pro-Line's sales have risen to nearly $60 million. Isabell, a former Miss Black Alabama, rose from market analyst to executive vice-president, even as she raised their children. Comer says that Isabell overstates her role in Pro-Li

In the August trial, Isabell will argue s entitled to half of Pro-Line, worth up t million. But last year she accepted a $2.8 lion settlement, which she is now tryi get out of. To get most of the money, Is says, Comer insisted she would have to as a "special consultant" to Pro-Line, repo only to her ex-husband, at an effective sa of $180,000 a year—a fraction of wha made as executive vice-president. Come putes her version of the facts and argues the company is his sole property, sin owned it prior to the marriage.

Faced with such contentiousness, mo ecutives are rushing to protect thems For high-ranking businesspeople of both s prenuptial agreements remain by far the effective weapon. Yet they are still the e tion, not the rule. In the BUSINESS WEEK ris Poll, just 3% said they had signed a p even though roughly one-third had been ried at least twice. One reason: Getting tended to sign "is not as easy as it sound," says Boston attorney Harold P

DEADLINE PRESSURE. And prenups are no clad. If the poorer spouse isn't fairly tr the contract may be nullified. That's wha pened to Florida hotelier Philip J. M Two days before marrying Gayle Hjort 1987, he suddenly presented her with a that didn't disclose his net worth, then $2 million. Hj who had zero net worth, was given "only one day t counsel... or cancel the wedding," a Florida court When the marriage collapsed six years later, McCabe to enforce the prenup, which provided Hjortaas just $ But the court, ruling the prenup was both "the pro duress" and "inequitable," threw it out instead.

Other types of deals between divorced couples are als scrutinized anew. Last year, a New York appeals co fused, in a preliminary ruling, to enforce a postnuptial ment, a rare type of contract that is essentially a made after marriage. The postnup in question, signed after a 29-year marriage, provided that Ellen Reich immediately receive $11 million in exchange for giving rights to the other assets of husband Gerald I. Reich, a attorney. But after Gerald filed for divorce, Ellen, says torney Norman Sheresky, moved to have the postn aside, alleging that he had used "terror and intimidati dupe me into signing a document that... grossly unde our assets." The charges "are all untrue," says Gerald's Peter Bronstein. The matter is now headed to trial.

Meanwhile, executives who don't have prenups a turning to aggressive new strategies to reduce their take in a divorce. Dallas attorney Michael McCurley, p of the American Academy of Matrimonial Lawyers, called predivorce planning strategies are becoming inc ly common. One tactic is to "game" compensation by more of it into the future. Some executives, for exam their boards to say that stock options are being grante ture as opposed to past services. Others are "concealin declining promotions, and deferring opportunities" until divorce, says Miami attorney Maurice J. Kutner, who h American Bar Assn.'s Family Law Section.

Executives in private companies can sometimes p boundaries of ethics even further. They're often ma disguising income as corporate "benefits." By ha company pick up the tab for everything from cars "you might see an executive with a W-2 of $50,0

tyle of $300,000," says Bruce L. Richman, an accountant Clifton Gunderson LLC. And businesspeople in private panies almost always undervalue their private holdings, h are far trickier to analyze than public entities.

erhaps the most extreme strategy, and the most ethical- abious, is to shift assets into an offshore trust in such ns as the Cayman Islands, Belize, and Gibraltar, which recognize U.S. divorce judgments (box). They can be re- ably effective. Stephen C. Maloney, a Boston attorney, re- y represented a woman who "essentially gave up" after told it would cost $100,000 just to figure out how much y her husband had in his Channel Islands trust.

another case, now being tried in Santa Fe, wealthy Swiss industrialist Donald Hess moved most of his stock in Hess Holding, estimated to be worth more than $200 million, to an offshore trust in Gibraltar just two months before filing for divorce from his wife, Joanna, a former model and an American citizen, in New Mexico.

Now, the New Mexico court has appointed PricewaterhouseCoopers to determine the value of the assets Donald transferred to Gibraltar. The report is due in August. But even if they come up with a number and the court awards Joanna a big judgment, it will be difficult for her to collect because of Gibraltar's laws erecting obstacles to creditors.

For their part, wealthy wives are also using increasingly aggressive tactics, sometimes leveling ugly abuse charges. In

SALTING IT AWAY IN MARGARITAVILLE

ew people can even find the Cook Islands—a group of volcanic specks 1,600 les off the coast of w Zealand—on the p. But over the past ade, the Cooks—ng with equally uscule jurisdictions h as Belize, Gibral- , and the Cayman Isds—have emerged as ccas for millionaires king for offshore sts to shield their alth from people who nt a piece of it, inding creditors and ry ex-spouses. All of se tiny nations have sed laws making it rly impossible for mants to collect.

Now, interest in the flung offshore trusts xploding. Once limito the ultrarich, se days they're ked in personalnce magazines and he Internet to peowhose net worth is er $1 million. Denattorney Barry S. el, who co-authored the Cook Is- s trust law in 1989, says his firm by now helped Americans trans- $5 billion to $7 billion offshore. In experts suggest, rich Americans funneled hundreds of billions these trusts. "Being successful es you a target in our country," ns Engel, who says an offshore t is akin to "taking out a firerance policy" against a legal sysrun amok.

aybe so, but this "insurance" is generating more and more con-

DONALD HESS

His wife claims he shunted stock worth millions to Gibraltar two months before filing for divorce

troversy. Offshore trusts are "hideous scams" that allow "the wealthy to say, 'I don't have to abide by the rules that apply to everyone else,'" says Harvard Law School professor Elizabeth Warren. She and other legal experts have begun calling on lawmakers to rein in the trusts.

For now, offshore trusts can be a highly effective method of shielding assets. Consider the ongoing divorce battle between Swiss industrialist Donald Hess and his American wife, Joanna. Just two months before filing for divorce in New Mexico, Donald allegedly transferred 92% of the stock in Hess Holdings—estimated to be worth over $200 million—to an offshore trust in Gibraltar. Although Joanna has spent $600,000 in legal fees, she has failed in several attempts to assert a claim on the assets.

The reason creditors like Joanna have a hard time is that most offshore jurisdictions don't recognize foreign judgments. Moreover, they face the expensive proposition of retrying the case where the trust is based. Creditors also often confront very short statutes of limitations for proving fraud—and usually must pay all court costs if they lose. In the Hess case, the Gibraltar Supreme Court in March refused to even hear Joanna's claim that Donald's trust was an effort to defraud her. While she is now pursuing her claims in New Mexico, Donald is standing firm. He maintains that the trust was established solely to avoid estate taxes in the U.S. and Britain.

The ironclad protection doesn't come cheap. Engel charges a flat fee of $18,500 to set up a trust, and annual ongoing management fees run into the thousands. Almost any type of assets can be placed in the trusts, including cash, stocks, title to real estate, even copyrights. Moving money offshore also entails some big risks. There's less protection against fraud overseas and no guarantee that political or legal changes won't render the trust worthless.

KEY DECISION. Now a series of recent court rulings suggests the tide may be starting to turn against offshore trusts. In the latest, on July 1, a New York judge struck what could prove to be a landmark blow against the use of such trusts in a divorce. The case involves Roger Riechers, a New York area urologist who moved $4 million to an offshore trust set up in the Cooks by Engel's firm. In 1994, his wife Mary filed for divorce. Although Riechers argues he was simply trying to protect himself from potential malpractice claims, the judge nonetheless ruled that the $4 million was "marital property" and that Mary deserves half.

While courts in the Cooks may not honor this judgment, the New York court could force him to return the assets by citing him for contempt. "This is a terribly important case," says Harvard's Warren. It will take more cases for the backlash to build, she adds. But if it does, the Cooks and other offshore havens may lose some of their newfound allure.

By William C. Symonds in Boston

her 1996 divorce from billionaire investor Fayez S. Sarofim, Linda Hicks Sarofim asked that their prenuptial agreement be thrown out and accused him of alleged assault, false imprisonment, and spousal rape. She also sought $100 million in damages. When the case was resolved in late 1996, before the trial was to begin, the Texas judge sealed the settlement and barred comments about its terms. Fayez strongly denies all charges that he mistreated his ex-wife.

Given such nastiness, it's not surprising that most attorneys say the best strategy is to settle out of court. That's how more than 90% of executive divorces are resolved. Settling is cheaper, avoids the publicity of a trial, and lets execs craft deals that minimize taxes. It gives an executive the best shot by far at keeping more than 50% of the estate—most large cases settle with the dependent spouse taking less than half. Lorna Wendt says she has heard from "many, many women" who struck such lopsided deals "because they couldn't deal with the pressure" from their husbands.

But as wives grow more assertive, settling isn't always a cakewalk. Costello, the former Cadence CEO, relates how after hearing what he felt was an unreasonable settlement proposal from his ex-wife, Margaret, he contacted her father, a Wisconsin developer, to enlist his help in reaching a quicker settlement. With the father's blessing, he offered $10 million. $12 million. Margaret was furious. "I totally felt he was using my Dad" by putting forward a figure huge by Wisconsin standards but a sliver of Costello's Silicon Valley-size fortune. Her hard line paid off: He ultimately shelled out $30 million. "I didn't want my whole life to be about this," he says. For executives, the overall message is unmistakable: Marriage is one of the most important business decisions they ever make. And if things fall apart, the divorce is likely to be a lot more upsetting than any business deal gone sour.

By William C. Symonds in Boston, with Peter Burrows in San Francisco, Stephanie Anderson Forest in Dallas, and bureau reports

BUSINESS WEEK/HARRIS POLL

HE SAID, SHE SAID

CARVING UP THE PIE

In general, how should property be divided in a divorce when one spouse has generated most of the family's wealth?

	MEN	WOMEN
The estate should be divided equally	41%	62%
The spouse who generated most of the wealth should receive a larger share	50%	28%
Don't know	9%	10%

THE FAVORED SEX

In general, do property settlements in divorce tend to favor:

	MEN	WOMEN
The husband	6%	25%
The wife	74%	30%
Both parties equally	13%	21%
Don't know	7%	24%

WHO SHOULD GET WHAT

How should each of the following assets be divided in a divorce? Should they be split evenly, or should a larger share go to the spouse who earned them directly?

	SPLIT EVENLY		SPLIT BY EARNINGS		DON'T KNOW	
	MEN	WOMEN	MEN	WOMEN	MEN	WOMEN
Company stock or stock options	40%	55%	53%	39%	7%	6%
Company pension	34%	44%	61%	48%	5%	8%
Ownership of a private company	38%	52%	57%	41%	5%	7%

WAR OF THE WENDTS

Recently, a high-profile divorce case involving Gary Wendt, chief executive of GE Capital, and his wife, Lorna, was tried. Lorna Wendt argued that she was entitled to half the estate, even though she didn't work for pay. Gary Wendt said he was entitled to more than half, as long as Lorna received enough to maintain her lifestyle. Do you tend to:

	MEN	WOMEN
Agree with Lorna Wendt	34%	52%
Agree with Gary Wendt	62%	43%
Don't know	4%	5%

PREVALENCE OF PRENUPS

If you have been married, did you sign a prenuptial agreement before you were married, or not?

Signed a prenuptial agreement	4%
Did not sign a prenuptial agreement	96%
Refused to answer	*

HOW THE ESTATE WAS DIVIDED

If you have been divorced, how would you describe the property settlement in your divorce?

	MEN	WOMEN
The estate was divided equally	37%	58%
I received substantially more of the estate than my spouse	14%	1%
My spouse received substantially more of the estate	46%	38%
Refused to answer	3%	3%

A MATTER OF FAIRNESS

Which of the following best characterizes the way you feel about the property settlement in your divorce?

	MEN	WOMEN
It was basically fair	56%	79%
I received too much	0%	2%
My spouse received too much	43%	9%
Don't know	1%	10%

EDITED BY KEITH H. HAMMONDS

Online survey of 1,666 adults with household income $100,000 or higher conducted May 1-3, 1998, for BUSINESS WEEK by Louis Harris & Associates Inc. For complete results of this poll go to: www.businessweek.com or America Online, Keyword: BW. To participate in this and future online polls, go to: www.206.1.46.26/bwdiv.htm.

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NEWSPAPER BARONS

THE MURDOCH OF THE NORTH

Empire builder Conrad Black mounts his boldest offensive

BLACK: *One ousted company director calls him "supremely egotistical"*

Conrad M. Black has a thing for Napoléon Bonaparte. The Canadian newspaper tycoon always keeps a book with the emperor's likeness writing nearby. And he even owns the that his hero sat in. Black's wife says that he likes to ponder weighty decisions while sitting in a chair that Napoléon once occupied while signing treaties, which Black dismisses as "affectionate spousal exaggeration."

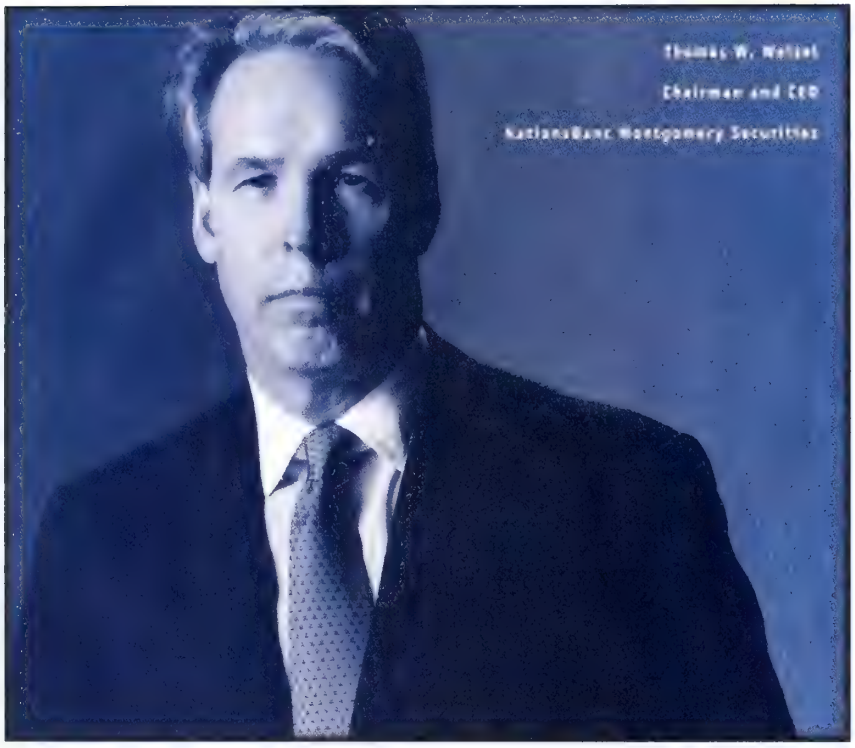
Like Napoléon, Black is driven by his own empire-building ambitions. The globe-trotting Canadian, whose $2 billion newspaper empire ranks behind only Rupert Murdoch's News Corp. and Gannett Co. in circulation, is now mounting his boldest offensive yet. On July 15, Black announced he would acquire the *Financial Post*, Canada's national business paper, and fold it into a new, mass-circulation general interest newspaper that he is readying for an Oct. 5 launch.

"ENOUGH IS ENOUGH." The 53-year-old Black, whose operations stretch from Vancouver to Jerusalem, already has a lock on more than half of Canada's newspaper readers. But the remake of the *Post* into a flashier paper is still a big risk. Black must pour untold millions into the paper as he plans to triple the *Post*'s 100,000 daily circulation. Demand for the product is unclear. And Black, who owns 61 of the country's 105 dailies, is criticized for controlling so much of the media. "There is a point at which enough is enough," says competitor John Honderich, the *Toronto Star* publisher.

Black clearly disagrees. He first got into newspaper publishing with a tiny small paper in Quebec in 1966 and has since has been constantly looking for ways to build. Now, through Hollinger International Inc., Black controls 300 newspapers worldwide, of which about 247 are in the U.S., including the Chicago *Sun-Times*. He made a failed bid for the *New York Daily News*, and has said he would like a shot at buying the *Wall Street Journal* someday.

Big bets and even bigger talk always come easily to Black, who enjoyed a privileged upbringing in Toronto. Though clearly bright, he was a miserable student who preferred pranks—and worse—to studying. The son of a well-to-do brewery executive, Black recounts in his memoirs that he was expelled from the elite Upper Canada College primary school for stealing and selling exams at age 14. The following year he was nearly thrown out of a second private school for throwing ink on a teacher. In his freshman year at McGill-Carleton University, Black was so busy playing cards that he seldom folded

SIEBEL FUELS LONG-TERM GROWTH



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for classes and nearly flunked out. He earned that distinction later when, consumed with playing the stock market, he was booted from Toronto's Osgoode Hall Law School.

Black eventually did get his law degree, in 1970, at Laval University in Quebec City. With his conservative ideological bent and zest for rubbing shoulders with political big shots, Black was drawn early on to newspapers. He began by buying up small, distressed papers and streamlining them by cutting staff. But he spent much of his thirties multiplying his $2 million inheritance by dismantling a Canadian conglomerate he wrested control of in 1978. He then broke into the newspaper big time with his acquisition in 1986 of the *The Daily Telegraph*, a leading London newspaper, and followed up several years later by snapping up Southam Inc., Canada's biggest newspaper chain.

But business is not Black's only passion. He takes himself seriously as a deep thinker and student of history. At each of his three residences in New York, London, and Toronto, Black keeps libraries crammed with thousands of tomes. And he likes to show off his vocabulary with such ornate words as "rumbustious," and "fissiparous."

SOCIAL CLIMBING. In addition to books and ten-dollar words, Black likes to collect well-placed people. His ambitious networking—some would say social climbing—has aided his success, Black says. Over the years, he has surrounded himself with powerful and influential figures to advise Hollinger.

The roster includes William F. Buckley Jr., former U.S. Secretary of State Henry A. Kissinger, and former Federal Reserve Chairman Paul A. Volcker, as well as former British Prime Minister Margaret Thatcher and former French President Valéry Giscard d'Estaing. Black meets with these tony advisers once a year to talk about his operations and the world scene.

Hobnobbing with luminaries is a passion for Black, says rival Rupert Murdoch. "He likes all the things in life that a good newspaper brings," says the News Corp. chief. "Certainly, newspapers at the very least increase his access to that world and he enjoys that, as I think we all do." Says Black's wife, columnist Barbara Amiel: "He doesn't Rollerblade, he doesn't play tennis. His pleasure in life is to be with intelligent, witty people."

One of the wittiest, says Black, is Amiel herself, whom he married in 1992, soon after his first marriage ended after 13 years and three children. Amiel is a former columnist for London's *Sunday Times* and the former editor at the *Toronto Sun*. When the couple got engaged, as a joke *The Sun* featured Amiel as its daily "Sunshine Girl," calling her "beauteous and brainy, right-wing and right on." Black regards Amiel as an ally: He named her a director and vice-president for Hollinger's editorial side.

Although newspapers have been Black's ticket into elite circles, he hasn't always thought so highly of editors and reporters. He once told a Canadian Senate committee looking into the media's coverage of the French separatist movement that many reporters were "ignorant, lazy, opinionated, intellectually dishonest, and inadequately supervis[ed]." Years later, when he was removing [some] time Southam directors after he bo[ught] control of the outfit, he called the[m] "obdurate rump."

Not surprisingly, Black has made [a] ty of enemies. One ousted director, [A]. H. Zimmerman, speaks for many [when] he calls Black "supremely egotis[tical]" and someone to be "very wary." Southam vet[erans] still bristle at [how] he wrested co[ntrol] of the newsp[aper] chain from [its] founding fam[ily]. He then moved [quick]ly to cut [costs]. "His slash[-and-]burn was p[ainful] ruthless," say[s] mer Sou[thern] Chief Executi[ve] Clair Balfou[r]. Black, thoug[h], layoffs were [essen]tial to shore [up] company's fin[ances]. Investors [have] been trouble[d] what some ca[ll] Black factor[,] spite Hollinger['s] proving financ[ial] sition. Net ea[rnings] have jumpe[d] $104.5 millio[n] just $6.3 mil[lion] 1995, while sales have more tha[n] bled, to $2.2 billion. But shareh[olders] who watched Hollinger Interna[tional] stock price slump from 13 at th[e] 1994, IPO to around 9 in early 19[97] main wary of his tactics. One exam[ple] 1993, Black sold stock in *The Dail[y Tele]graph* a month before announcing [a] cut in the paper that reduced re[turns].

A passionate monarchist, he h[as] criticized for pushing his own view[s] papers. But Black insists he's [a] logue. "What you do is try to hire [people] that you agree with, so you d[on't] apoplexy reading the paper," say[s] As for investors, he insists they [have] reason to be dissatisfied. "Ther[e's] Black factor," he says. "Hollinger [has] a respectable performance." Th[e stock] now trades at 17½.

Now, Black must turn to build[ing] new general interest newspapers. *The Financial Post* may be a go[od] But as he seeks to transform it[, Mr.] Black will no doubt be spendi[ng] early morning hours stroking hi[s cat] he sits in Napoléon's chair.

By Joseph Weber in To

CONRAD MOFFAT BLACK

BORN Aug. 25, 1944, Montreal.

EDUCATION BA 1965, Carleton University, history; LLL (law) 1970, Laval University; MA 1973, McGill University, history.

FAMILY Second marriage to Barbara Amiel in 1992. Three grown children from a previous marriage.

MAJOR HOLDINGS *Telegraph* (daily and Sunday) in London, *Jerusalem Post* and *Chicago Sun-Times*. Total revenue for all 437 papers he owns: $2.2 billion.

BEST PART ABOUT BEING A PRESS BARON Hobnobbing with Henry Kissinger, Margaret Thatcher, and other luminaries.

BIGGEST FRUSTRATION Walked away from the *New York Daily News* deal when unable to get union agreement.

EARLY CHALLENGE Severe anxiety attacks and periods of "obsessive fear."

ON HIS PLANS FOR A NEW NATIONAL DAILY IN CANADA "We'll just try and produce a good, lively paper. . . . Convincing the world that Canada is an exciting place is a rather greater undertaking than I want to get into right now."

BIG REACH: The Financial Post *joins Black's empire*

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EXECUTIVE SUITE

THE CENDANT MESS GETS MESSIER

With warring execs, a split board, and sagging stock, pressure on management is mounti

When franchising giant HFS Inc. and discount-shopping-club operator CUC International Inc. merged late last year, the new company, dubbed Cendant Corp., was supposed to become a marketing powerhouse selling millions of customers everything from travel services to mortgages. But that wasn't the only behemoth the deal spawned. When the company's board gathered in April—shortly after a bombshell disclosure that accounting irregularities had been discovered in CUC's books—the meeting had to be held at the law firm of Battle Fowler. The reason? Cendant's Manhattan offices didn't have a conference room that would hold 28 board members and their advisers.

That logistical headache speaks volumes about the struggle for control of Cendant. The company's unwieldy board is effectively paralyzed, split between directors who support Walter A. Forbes, the Cendant chairman who founded CUC, and those who back Henry R. Silverman, the Cendant chief executive and HFS founder. Some investors say Silverman wants Forbes out. In the wake of the April bombshell, the CUC and HFS directors hired separate lawyers—and things since gone from bad to worse. On 14, the company disclosed that th counting woes went far deeper th pected. And on July 22, Ernst & LLP, CUC's former auditor, said in a ment that "from information provid Cendant to the media, it appear efforts may have been taken to d the auditors." With the stock now around 17—down from 41 in Apr vestors have become increasingly about hastening Forbes's exit.

Resolution may come quickly. A NESS WEEK went to press, sources iar with discussions said talks ha held recently between represent for Forbes and representat the company about term possible departure. R by phone, Forbes is terse "no comme spokesman for Forb he has no plans to a Certainly, the h been turned up on

AT ODDS

As the accounting scandal deepened, Forbes and Silverman retreated into opposing camps

WALTER FORBES

HENRY SILVERMAN

. Silverman has been telling big
lders who want Forbes removed
or call board members. Says Di-
ohn D. Snodgrass: "I do receive
om large shareholders that re-
ie board to take action." Even if
s fall through, pressure is building
board to act before a report or-
y the Cendant audit committee is
ed in August.

ing at the makeup of the Cen-
ard, it's easy to see why the man-
t issue hasn't been resolved quick-
wice as big as the boards of most
ublic companies, says Thomas J.
J.S. chairman of headhunter
Stuart. That alone
s decisive action.
ore than half of
ctors could be de-
as insiders, ex-in-
or business associ-
Cendant, of its
edecessors, or of

n of the directors
ndant executives;
h resigned his ex-
post just before
unting disclosures
ains as a director.
er directors—in-
two on the four-
audit committee
overseeing the ac-
g probe—have
or recent busi-
alings with Cen-
rectly or through
mpanies in which
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that committee,
ck D. Green, has
ed with Forbes in
ng golf courses in
ts as Nantucket,

AP? None of that
ll with big in-
some of whom
lready dumped
of shares. And
ice experts say the board's make-
s questions about its directors' in-
nce. "Those are warning
that you have CEOs [meaning Sil-
and Forbes] who have appointed
vith conflicts," says Sarah A. B.
xecutive director of the Council
itional Investors. "That can make
t difficult."

executives deny problems with
d. "I think that is off-base," says
"The former CUC directors now
oard are decent people trying
good job in a difficult period."
verman: "If the board listens to
in a dispassionate way, I would
em to do the right thing."

For now though, board action does not appear imminent. One director from the CUC side says he doesn't think the board should meet until the auditors' report comes out. He's paying little attention to Cendant's statements about revenue restatement. "I've known Walter for... years and never caught him lying," he says. But Snodgrass, from the HFS side, says: "If all that has been written is true, I think he should go." Other directors didn't return calls or would not comment on the record.

Under terms of the merger, Forbes and Silverman were to swap jobs in January, 2000. Many investors say it is inevitable that Forbes will exit. But if he does not go voluntarily, an 80% vote of the board is required to remove him. To avoid paying Forbes a severance package worth at least $50 million, Cendant must terminate him "for cause," according to the company's proxy. Included in that definition: "serious, willful misconduct" such as fraud.

That doesn't mean shareholders are sitting on their hands. Hans Utsch, president of the Kaufmann Fund and a large Cendant investor, plans to write a letter urging the board to remove Forbes. And at last count, 68 shareholder lawsuits had been filed against the company. A spokesman for Cendant says the company does not comment on pending litigation.

Silverman, meanwhile, is facing pressures of his own from investors to boost the stock. According to sources familiar with the position of veteran Wall Street investor Leon G. Cooperman, he wants the Cendant CEO to sell off some noncore operations, including CUC's software businesses. That would raise money that could be used toward completing the planned $3.1 billion acquisition of credit insurer American Bankers Insurance Group Inc. using all cash instead of the cash-and-stock deal now planned, which some investors worry will be dilutive. And another big shareholder has been pressing Silverman to explore a complete spin-off of CUC, effectively undoing that merger. Silverman says it is "premature" to talk about restructuring the American

NO WAY TO RUN A BOARD

Why Cendant's board is under fire

OVERCROWDING

With 28 directors, Cendant has about twice the average for a large publicly held company, split between the CUC and HFS sides.

FEW OUTSIDERS

Many are executives or former execs of the merged company, leaving few strong outsiders to advocate an independent position.

BUSINESS LINKS

Some directors appear to have had conflicts of interest, including contracts to do work for Cendant, and private ventures with Cendant or Walter Forbes.

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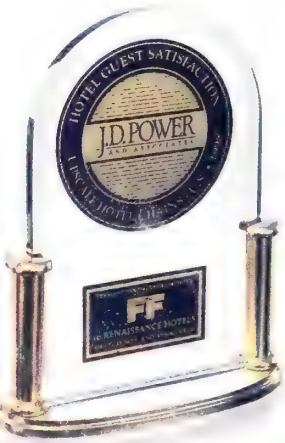

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e Corporation

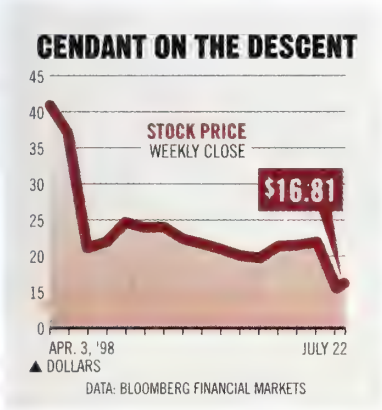
's deal and that a CUC spin-off be impractical. "You can't un-le the eggs," he says.

ainly, no investor could have ed the scope of the problem. Cendant announced on Apr. 15 had uncovered accounting ir-rities, most analysts and in-s figured the company had, if ng, overstated the problem to management's credibility. But it orse than expected. Auditors Arthur Andersen & Co., which en hired to comb through CUC's rs, uncovered what was de-as a "widespread and systemic" e of overstating or fabricating . Net income before charges for ould have to be reduced by $200 to $250 million, the company ced, twice the l estimate. gs for 1996 95 would also o be revised in part on the ry of fictitious venues.

so turned out big chunk of a arge taken at ime of the ; about $200 after taxes, have to be re-That occurred ry Silverman's watch. "I was in when I read that," says David P. a senior portfolio manager at Roe & Farnham Inc., a large t shareholder. Silverman says rtion of the yearend charge was l by CUC execs and auditors.

ing a quick resolution of the ment crisis, the ball will be in ds of the Cendant board, which several directors who go back ith Forbes or Silverman. Three s who were on the board at artlett Burnap, T. Barnes Don-nd Stanley M. Rumbough Jr.—mong its early investors, and ade substantial money in the der Forbes's leadership.

tors from the HFS side of the so have connections. Several Cendant directors bought lim-rtnership interests through a placement in a new HFS hotel lled Wingate. Included: Silver-odgrass, who was the HFS pres-til last December, Cendant ex--board-members James E. n and Stephen P. Holmes, and director and now president of Online Robert W. Pittman.



Cendant bought out those interests earlier this year. Silverman says the five directors did not vote on that decision, and that it was made by disinterested directors. In addition, Snodgrass served as a consultant this year for Cendant after it purchased Jackson Hewitt Inc., a tax-preparation company. Snodgrass says neither deal posed a conflict.

MAGIC MOMENT. No one has suggested these deals were improperly handled. Still, says governance expert Charles M. Elson, "If you are making a profit aside from other shareholders, that certainly raises a question about independence from management."

Some directors are also taking heat for selling shares soon before the April disclosure. According to CDA Investnet, which tracks insider sales, Silverman sold 1.7 million shares in February at about $36, while Forbes sold 300,000 shares in March. Directors Rumbough, Burnap, and Martin L. Edelman sold in March, and Snodgrass sold over 1 million shares in March and April, ending the week before problems were announced. Says Robert M. Gabele, president of CDA Investnet: "These were among the most timely sales we've ever seen at the company."

Silverman says that his sale was part of a pattern of selling shares each quarter, while a spokesman for Forbes says he sells a small amount of shares every year. Snodgrass says he was diversifying his holdings. All three deny any knowledge of the accounting problems at the time of the sales. The other directors wouldn't comment on their sales.

Once the boardroom battle is resolved, investors may see a rebound in Cendant stock. But a number of analysts warn that failure to resolve that issue quickly could result in deterioration of Cendant's underlying businesses. Merrill Lynch & Co. analyst Mark R. Miller reduced his Cendant rating last week to neutral, citing concerns that the battle could distract management. Miller also noted the risk of management defections now that Cendant's stock options are less attractive. Indeed, if the Cendant board doesn't take control of the situation, the bad news may be just beginning.

By Amy Barrett in Philadelphia and Jennifer Reingold in New York

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DEALS

POOF! AND SMALL TURNS INTO BIG

"Roll-ups" combine similar companies and profit by economies of scale. They can be lucrative–and risky

When Steve Harter was growing up in a poor town in Iowa, his family hit hard times and his childhood home was repossessed. Today, Harter is a successful Houston venture-capital investor who sports monogrammed shirts and fancy silk ties. But he hasn't abandoned his roots.

Over the past several years, Harter, 36, has popularized an unusual and innovative method of bringing groups of small companies in similar businesses, typically with tens of million dollars in revenues, to the public market. Using the funds from the initial public offering, the entrepreneurs are able to buy additional companies through a strategy known as a "roll-up." Harter takes particular pleasure in the fact that many of the employees and the management of the small-businesses have become millionaires through stock options.

Harter's offbeat financing, through his firm Notre Capital Ventures, works this way: He will approach several private companies in the same industry, such as bus companies or air conditioning contractors. He then arranges an IPO to buy the companies and combine them into a single operating unit. The owners receive a combination of equity and cash. Some investors describe the maneuver as a "poof IPO," a kind of magic act where several companies are transformed, poof, into one company.

Harter usually ends up owning only 12% of the companies he takes public—vs. the 50% to 75% stake most venture-capital funds retain. "We are able to leave founders in the industry a substantial piece of equity," he says.

Harter's strategy has attracted a lot of other players. These deals have already created companies with some $22 billion in market capitalization, according to Howard, Lawson & Co., a Philadelphia investment bank. But he worries that promoters are taking the idea to extremes. One investment banker recently raised $527 million for a blind "poof" pool designated for as yet unnamed roll-ups, now called Consolidation Capital Corp. "This is the year of excesses," Harter says.

Those who play the roll-up game, often known as consolidators, tend to seek fragmented markets with no clear market leader. The idea is to buy up lots of companies to boost revenues and earnings while saving money through economies of scale. So far in 1998, there have been 20 poof IPOs, with a still-modest average price-earnings ratio of 15 to 17. It's a strategy momentum investors love, since earnings usually blossom quickly.

But roll-ups have their detractors. Integrating dozens of companies can be a challenge. "They work for a while, but investors better be ready to get out of the thing before it collapses," says Howard Schilit, president of the Center for Financial Research & Analysis in Rockville, Md. He warns investors to look out for red flags in companies that grow too quickly: consistent one-time charges, declining growth in core companies, or ever larger acquisitions used to mask serious problems. Typically, says Schilit, "these stocks spike up and then, often with very little warning, the stock starts to collapse."

"It's the best and worst of capitalism," admits Harter. "Capitalism is a herd mentality.... What people don't understand is what happens the second, third, or fifth year out—how to position the business over the long period of time. What happens [illegible] of these businesses a[illegible] to blow up."

STILL ROLLING Steve Harter took Coach USA public, then boosted revenues by cutting its buses' idle time

An example of a [illegible] failure is Telesp[illegible] Worldwide, a telem[illegible] roll-up with revenues [illegible] million last year. It [illegible] went from 21¾ in 19[illegible] last March after it [illegible] lots of companies at high multip[illegible] then lost its major customer.

Harter has scraped his knees [illegible] Take Physicians Resource Grou[illegible] an ophthalmology roll-up with [illegible] $411 million, whose stock at [illegible] was trading at 33 in 1996 and [illegible] quoted at 4. While Harter s[illegible] problems stemmed from confus[illegible] national health-care strategies [illegible] say PRG grew too fast, its co[illegible] weren't integrated properly, a[illegible] agement was weak. "None of t[illegible] cian consolidations are doing w[illegible] Harter. "Is it an industry prob[illegible] Steve Harter problem? But I[illegible] going to tell you that this com[illegible] my strongest management tea[illegible] were replaced."

Of the seven other poof IPO[illegible] has taken public over the p[illegible]

Melding small companies can boost earnings fast. Bu[illegible]

all are now trading on the New ock Exchange. He has had such nt winners as Comfort Systems c., a commercial designer and of heating and air conditioning, venues last year of $324 million. t went public in June, 1997, of-3.1 million shares at 13. Today, k trades at 24⅝. Another Harter y is Coach USA Inc., a bus com-ken public in March, 1996, with lion shares at 14. The key to g revenues at Coach was pro-y: Buses that had been idle for the day were given new routes os to fill up time. Coach shares de at 50¾.

os. In choosing deals, Harter believes in a tight focus: He ries to add on any unrelated ses after the IPO. Many indus-e says, are not appropriate for because they are either too de-on one major customer, or con-on wouldn't provide any addi-value to a customer or a ion channel. Plus, Harter likes the shares offered to the public the IPO as small as possible s the company grows, more an be offered through a sec-ondary offering at a much higher valuation.

But Harter is concerned about the current flood of poof IPOs. He cites the $527 million pool, raised by Jonathan J. Ledecky, the founder and former CEO of U.S. Office Products, with the assistance of Friedman, Billings, Ramsey, & Co., a Washington (D.C.) investment bank. The fund, called Consolidation Capital Corp., was a blind pool: Investors were asked to contribute, even though the promoters did not identify what industries would be rolled up.

Ledecky's previous company, an office supplies distributor, acquired over 200 companies from 1994 to 1997 in seven different industries. From the stock's split-adjusted 52-week high of 25.67 last October, the shares dropped to 17 this past May. "The wisdom of Wall Street was that there were too many moving pieces," says Ledecky about U.S. Office Products. "But I still think that's a bunch of bull." Ledecky did add, however, that integration was an issue. Four U.S. Office Products companies were later spun out this past spring.

ACQUISITION BLUES? As the shares began plummeting last fall, Ledecky left his CEO post at U.S. Office Products to start other new ventures like Consolidation Capital. Consolidation has since announced it is buying groups of companies in the janitorial, electrical, security, and pest-control industries, to name a few. "In my opinion it's another bunch of companies that don't make sense together. It looks like U.S. Office Products all over again," says Harter. With 30 million shares outstanding, and lots of cash to deploy, its investment task is enormous. Ledecky will need to make acquisitions fast, and integration could still be a problem for him, say some professional investors.

But Ledecky is quick to defend his roll-up practices: "I am so successful at doing this—the strategy I have works. But the people who don't follow that strategy are always gunning for me.... Most non-John Ledecky roll-ups don't work," he adds. Last October, Ledecky also started Unicapital, which raised $532 million in an IPO to buy equipment-leasing and specialty-finance companies.

Harter likens today's craze of poof IPOs and roll-ups to the leveraged buyouts of the late 1980s. "While there were good deals done by knowledgeable people, a lot of people did them who didn't understand the dynamics of LBOs," he says. "They got into a lot of trouble and bankrupted companies. The same thing is happening with consolidations today." In a word: Poof.

By Debra Sparks in New York

POOF IPOs

NAME	PRICE*	IPO DATE/PRICE	
THE GOOD...			
FYI	31¼	(1/96)	$13
COACH USA	50⅜	(5/96)	14
COMFORT SYSTEMS USA	24⅝	(6/97)	13
...AND THE NOT SO GOOD			
PHYSICIANS RESOURCE GROUP	4⅛	(6/95)	$13
TELESPECTRUM WORLDWIDE	6⅛	(8/96)	15
AMERICAN RESIDENTIAL SERVICES	9⅞	(9/96)	15
FORTRESS GROUP	5½	(5/96)	9

*JULY 22 DATA BLOOMBERG FINANCIAL MARKETS

ation, or reliance on one customer, will spark trouble

COMMENTARY

By Gary Weiss

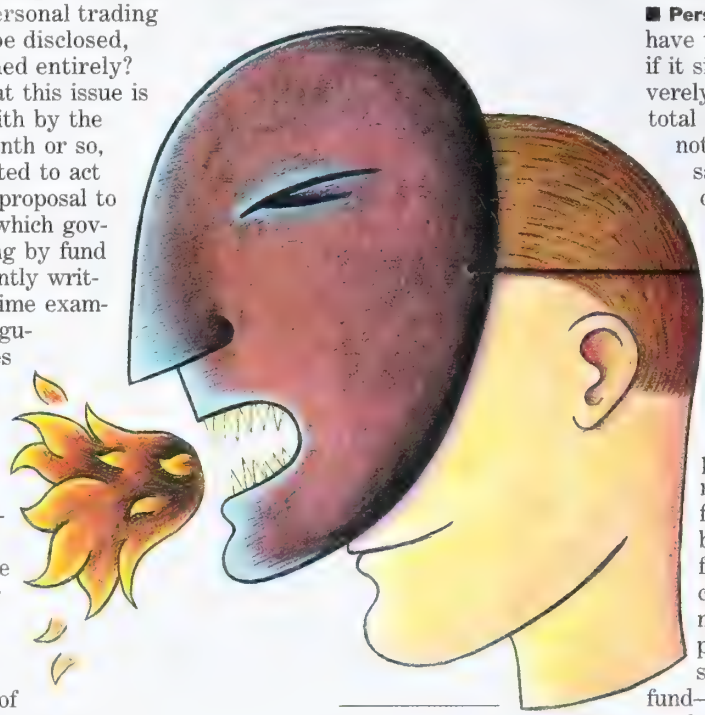
THE SEC SHOULD KEEP FUND MANAGERS HONEST

After weeks of embarrassment for Dreyfus Corp., the Schonberg affair is finally dying down. Michael L. Schonberg has been put on paid leave while at least three investigations—including the FBI—probe his personal ownership of penny stocks purchased by his two "aggressive growth" funds. But no amount of investigating will resolve the thorniest question raised by this mess: Should the Securities and Exchange Commission require that personal trading by fund managers be disclosed, restricted—or banned entirely?

Well, it seems that this issue is about to be dealt with by the SEC. In the next month or so, the agency is expected to act on a three-year-old proposal to change Rule 17j-1, which governs personal trading by fund managers. As currently written, the rule is a prime example of do-nothing regulation. All it requires is that fund companies adopt codes of ethics "reasonably necessary" to prevent "fraudulent, deceptive, or manipulative acts" when fund managers trade stocks held by their funds. Yep—that's all. Fund managers are allowed to buy and sell the shares of companies held by their funds, even illiquid shares of tiny penny stocks. Only their consciences—and ethics codes—are there to guide them. And as the Schonberg affair illustrates, both can fail to avert questionable conduct.

Don't expect a regulatory juggernaut. The SEC-proposed rule change, which is wending its way through the agency, has the enthusiastic support of the mutual-fund industry. And for good reason—it is little more than a ringing endorsement of the status quo. Under the rule being proposed, fund boards would be given responsibility over their funds' ethics rules and would be provided with periodic reports on personal trading by fund managers. The ethics codes would be filed with the SEC and would be available for perusal by the public. Prospectuses would have to note that the funds have ethics codes and disclose whether they permit fund managers to buy stocks that are owned by their funds. Also, fund managers would have to report their holdings when they join a fund.

It sounds good but in fact would do precious little. To begin with, the SEC expects too much from fund boards, which are hardly the Ralph Naders of investing and don't even approach their corporate cousins in activism. And no wonder—fund directors often don't even have a personal stake in their funds. The other "new" proposal, which requires fund managers to report their holdings when they start working, is really old hat. Most funds already have that requirement. No, the status quo needs to be changed, not ratified. The changes that should be made by the SEC fall into a couple of broad categories:



A proposed rule change does little more than endorse the status quo

■ **Disclosure** The SEC proposal is ridiculously timid on this subject. Fund customers have a right to know if fund managers own the sa stocks their funds buy. Why not p it right in the prospectuses, semi-a nual reports, and annual reports? Why not publish the ethics rules a well? Fund customers should not have to go to the SEC to obtain su vital information.

■ **Personal Trading** The SEC won't have to worry about disclosure at if it simply bites the bullet and se verely restricts personal trading. total ban is not necessary—and m not even be permitted by law, says Robert E. Plaze, associa director of the SEC's investm management division. Indee there's no reason money-ma ket fund managers should prohibited from buying mor market securities. But stric limits are needed for the va majority of fund managers, the SEC should set them.

If fund managers want t play the market, they should required to buy their own funds. Buying stocks that m be considered by their own funds is simply too prone to conflicts of interest. So if the manager of a gold fund wan play the gold market, he or should do that via his or her fund—and not some gold-mining stock. And there should be a stri prohibition against fund manager obtaining "cheap stock" in privat placements of any company, whe or not their funds can buy it—an er issue that is raised by the Sch berg affair.

The SEC's Plaze stresses that ing a rule will not, by itself, pre improper trading by fund manag He correctly observes that enfor ment of the securities laws is th other major tool in the SEC's ars But in reassessing Rule 17j-1, th SEC has a golden opportunity to the lead—and not pass the buck the fund industry. It shouldn't l that opportunity slip by.

Senior Writer Weiss covered t Schonberg affair for BUSINESS W

ENE G. MARCIAL

FLOOD OF BIDS AT w.sothebys.com?

orks of art auctioned off by Sothe-by's Holdings (BID) often fetch d sums. And Sotheby's own stock, ssed in this column on Apr. 21, at 15 a share, is up a nifty 25% year, to 23. Ron Baron, president aron Capital Management, which oversees more than $8 billion, believes the stock is still undervalued. When investor Perry Bass unloaded his large position in Sotheby's shares last month, Baron snapped it up, raising his stake from 22% to 30%.

ON: *Sees rich ons on the Net*

Baron likes the glamour of the art world. And guess where he the next splash for Sotheby's: Internet presents lots of oppor-es, and Sotheby's is looking at all em." The Internet could expand eby's markets fast, adds Baron, as an impressive track record in g winners. Since its start in 1987, agship $5.8 billion Baron Asset has posted an average yearly of 19.1%, vs. 14.8% for the Stan-& Poor's 500-stock index.

on reckons Sotheby's may team th Net mainstays such as Amer-line, Time Warner, or Walt Dis-Executive Vice-President David n, Sotheby's Internet point man, wledges that Sotheby's is in talks several major players but won't hich ones.

e are very excited," says Red-The Internet could bring in new ers, broaden the range of prop-we offer, and augment the ser-we provide our traditional cus-s." In May, Sotheby's launched a ite detailing the more than 500 s in 80 collecting categories that y's holds every year.

Web site offers the catalog of all y's sales—in Britain, Switzer-Hong Kong, and the U.S. On 1, Sotheby's closed its first In-auction (books and manuscripts), comprising 121 lots of American and English works, including a first edition of Edgar Rice Burroughs' *Tarzan of the Apes*. The sale brought in $80,000.

Baron figures that, excluding the Net factor, Sotheby's stock could double in three years. But the Internet, he says, could speed the stock's advance.

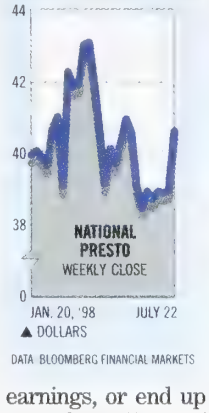
PUTTING A LITTLE HEAT ON PRESTO

National Presto Industries (NPK), a maker of electrical pressure cookers and frying pans, may soon see its stock start to sizzle. One reason: There are whispers that a manufacturer of housewares, home furnishings, and office products is accumulating shares with a view to making an offer to buy National Presto. Volume in the stock in the past few days has been well above the daily average of 22,000. On July 22, the stock jumped 1½, to 40⅛, on volume of 422,000 shares.

Any such move could hardly be hostile, since Chairman Melvin Cohen and CEO Maryjo Cohen control 30% of the 7.3 million shares. Other big players have been buying, too. Among them: Mario Gabelli, whose Gabelli mutual funds own 1.5% of National Presto.

Gabelli says he's buying more shares because they're way undervalued, considering the company's hefty cash hoard of $222 million, or $30 a share, with no long-term debt and book value of $33. And there is every indication, he adds, that Presto will come up with a "new, blockbuster product that could put a shine on earnings."

IT'S STARTING TO COOK



DATA: BLOOMBERG FINANCIAL MARKETS

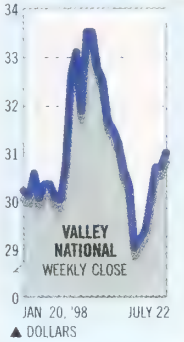
Investment adviser Charles LaLoggia says that, buyout or not, National Presto is a terrific bargain, with its dividend yield of 5%. "Either the company will make an important acquisition that would improve earnings, or end up being acquired," says the editor of *LaLoggia's Special Situation Report*. He notes that management implied it was not averse to selling the company when it rejected a shareholder demand last year to sell the company at a public auction. CEO Maryjo Cohen says the company isn't for sale.

VALLEY SURVEYS A LUSH VISTA

Is the banking consolidation about over? Not by a long shot, if some of the pros buying into the banks are right. The recent $8.6 billion buyout of Crestar Financial by SunTrust Banks creates the 10th-largest U.S. bank and puts pressure on some other mid-size banks to merge to compete.

Among those feeling the pressure, according to some investment strategists, is Valley National Bancorp (VLY), a Wayne (N.J.) holding company, with assets of $5.1 billion. Rumors are that they are in discussions to merge with a major bank. Valley, at 30 a share, could receive an offer of 45 a share in a stock deal, according to one adviser at a New York investment bank who had tagged Crestar as a takeover target last April. That translates into a price-earnings ratio of 18.7 times, based on estimated 1999 earnings of $2.40 a share. Crestar was valued at a p-e of 22.

RUMORS MAY HAVE SPARKED A RISE



DATA: BLOOMBERG FINANCIAL MARKETS

The pro says Valley's operations complement the potential buyer's. Valley provides a full line of commercial and retail banking services through 97 branches in northern New Jersey. It also runs units for mortgage servicing and asset management. The suitor operates mainly in the Northeast, Midwest, and southern states.

According to S&P analyst Michael Schneider, Valley "continues to be one of the industry's top performers in profitability, generating returns on assets of 1.85%, and a return on equity of 19.5%." Valley CEO Gerald Lipkin won't confirm any talks with suitors but comments: "If we get the right offer, they will own us."

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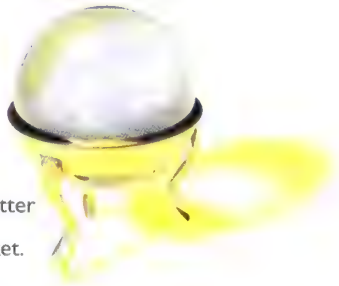
STORY #194:

My Wonderfully Predictable Future



LET'S just say you're the CEO of a large investment firm. You've got one eye on NASDAQ, one eye on Dow Jones and four hundred hands trying to grab the best stocks in both. You also know you have to face two hundred employees who want more money, better coffee, a parking place and notebooks that can handle a volatile market.

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SOFT DRINKS

COLA WARS ON THE MEAN STREETS

The battle heats up in Gotham–and the rest of the country

Until recently, the northern edge of Central Park was a weary, run-down spot. But in the past few months, the look of the place has changed. Suddenly, five convenience stores sport red awnings and one store features a new mural with a bright-yellow sun. The latest urban beautification program? Hardly. It's part of an aggressive new push by Coke into New York, long a Pepsi-Cola stronghold. After hanging the awnings and supervising the mural job, Coke's forces have taken to promoting the corner as a sign of their victory. Says Deborah Stokes, a longtime resident: "It looks like Coca-Cola Land now."

Harlem, a four-square-mile neighborhood, may seem like small potatoes. But these days, as Coke and Pepsi rev up their marketing rivalry, no fight is too small and no market too local to take on. With $30 billion in beverage sales between them, Coca-Cola Co. and PepsiCo Inc. have long battled each other with multimillion dollar ad campaigns and country-by-country marketing coups. And on July 20, Pepsi tackled Coke on a new turf, paying $3.3 billion for Tropicana Products Inc., a rival to Coke's Minute Maid.

But to make sure all that marketing money translates into bottles sold, both Coke and Pepsi are intensifying their efforts at the local level. With each pushing hard to improve U.S. market share, top managers are calling on the troops to redouble marketing and sales efforts as they duke it out in a storefront-by-storefront battle for soda supremacy. And nowhere is the fighting more heated than in the intensely competitive, intensely difficult New York market. "Many soft-drink executives think New York is the toughest market in the country," says John Sicher, editor of industry newsletter *Beverage Digest*. "The traffic is huge, the population is dens neighborhoods are complicated."

But it's also a huge prize—a PepsiCo, headquartered in Pur N. Y., would be loath to lose. Pep always spent big to stay ahead home turf. New York is one of on U. S. markets where Pepsi-Cola Coca-Cola Classic. Nationwide, along with its portfolio of other such as Sprite and Diet Coke—c 44.1% of the beverage market, ag stagnant 30.1% for Pepsi produc in New York, Coke's lead in tot is less than half that much.

BELLWETHER. New York is only th ing point. Both cola kingpins kno are plenty of underexploited oppo in other big urban markets, mak battle a forerunner for others be to unfold across the country. "Th of New York is pretty much the what's going on in the U.S. righ says Philip A. Marineau, presi Pepsi-Cola Co. North America.

The showdown over the Big began a year ago Coke's largest bottle Cola Enterprises In moved into the Ne market. CCE has sinc 600 more marketing and 60 new trucks to livery fleet, in addit multimillion dollar inv in infrastructure. Tha two years after a b truck routes to impr trol over distributio

The efforts are ev the streets. Each m representative visit 120 small stores a week, pus snazzier displays, better placem more promotions. When the 10th Avenue Gourmet store hattan's Upper West Side told old sales manager Rebecca Fl

NEW YORK, NEW YORK

As Coke tries to snatch Pepsi's lead in this key market, the two are fighting it out

COKE	PEPSI
BUSINESS: Pumps millions into trucks and infrastructure, adds 600 marketers	**BUSINESS:** Boosts investment and works with distributors to sharpen marketing
IMAGE: Pays for new awnings and new coolers at stores featuring its logo	**IMAGE:** Refurbishes landmark East River sign and launches an in-store campaign
PROMOTION: Gives away 2 million Coca-Cola Cards to build up its teen market	**PROMOTION:** Gives away 1 million Pepsis in one day, 600 Mets tickets every Friday

TROPICANA: A WAY FOR PEPSI TO SQUEEZE COKE

When PepsiCo Inc. announced on July 20 that it would pay $3.3 billion for juice giant Tropicana, there were plenty of reasons to wonder why. Unlike soda pop, juice is subject to commodity markets and vulnerable to bad weather and crop failures. Juice margins of 1% to 3% are far lower than Pepsi-Cola Co.'s 16% rate for soda. Even delivering the product is tough. Perishable fresh juice can only be transported and stored using costly refrigeration.

But for all its headaches, the juicemaker offers Pepsi the possibility of a sweet payoff. As the world's largest juice company, analysts say, Tropicana arms Pepsi—stymied in its core soft-drink market—with a powerful weapon in the war against archrival Coca-Col cana gives Pepsi a chance at something," says Stand Corp. analyst Richard Joy billion market fo juice, Tropicana's blows away Cok Minute Maid, wh Indeed, Tropican well selling its t fresh juices that Minute Maid pu $1.3 billion slice

O.J. also pro Sales of Pepsi b

planning a promotion
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up a giveaway of
Coke's competing
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Surge push is also
CCE's effort to align
keting programs
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For Coke, which
% of CCE, going lo-
ns working closely
e bottler, since their de-
orce is in the stores every
e can't do this on a macro
explains Henry A. Schim-
hief executive of CCE. "We
do it on a micro basis."

SAVVY. So far, the results of
Harlem push—and of redou-
forts in all of New York—are
sive. In the hotly contested
small-store segment, sales of
high-margin 20-ounce bottles
oubled. Throughout New York
ar, they're up 56%, well above
30% goal. Harlem supermarkets
een a boost too, with sales up
Even William W. Wilson, presi-
Pepsi's New York bottler, de-
the Harlem effort as "a good
t at tactical marketing." But, he
these things are hard to sustain."
in case, Pepsi is pushing its own
ork campaign to the hilt. But
than send out fresh new troops,
relying heavily on its bottler's lo-
ibution force to boost its presence
es, with new racks, coolers, and
ays. It is also making a big push
he most from its sponsorships of
Center, Radio City Music Hall,
Bronx Zoo with ticket giveaways
ertising tie-ins. Pepsi executives
that Coke will regret the decision
out distributors. By hiring out
fleet, Pepsi keeps costs low and
al savvy. Indeed, after the buy-
any of Coke's old distributors de-

fected to Pepsi, taking their connections—and crucial knowledge of the city's traffic patterns—with them. The result: Sales of pepsi's 20-ounce bottles in New York are up 77% over the past 18 months, thanks largely to big gains in Mountain Dew. Patrick J. Mannelly, group vice-president of CCE's New York territory, concedes that Coke is still fighting to recapture hundreds of small-store accounts.

MOXIE. That's not the only way Pepsi is using the street smarts of its entrenched distribution force—and its own connections—to trump Coke's efforts. When Pepsi's sports-marketing office learned that Coke's sponsorship agreement for Yankee Stadium was filled with loopholes, for example, it pounced. Now, even though Coke signs festoon the outfield and vendors hawk it in the stands, Pepsi's All Sport brand is in the dugout, where yellow coolers stand in full view of fans and TV cameras. Coke-North America President Jack L. Stahl can do little but sniff: "If you wandered in there, not a lot would be consumed."

Pepsi's renewed push reaches all the way to the top. Pepsi CEO Roger A. Enrico is using his friendship with Yankees owner George Steinbrenner to lobby for a switch when the sponsorship comes up in 2002. One promising sign: Steinbrenner did voice-over narration for a claymation ad for Pepsi's new Lipton Brisk tea that was set—of course—in Yankee Stadium.

Elsewhere, too, Pepsi has kept up the heat. It snatched the Shea Stadium contract from Coke this year, and now a group called the Pepsi Party Patrol uses a shoulder-mounted air cannon to launch T-shirts as high as the upper deck between innings. "Pepsi's interest and energy about this is palpable," says Mark Bingham, marketing chief of the New York Mets. In this hard-fought battle, Coke and Pepsi are doing everything they can to come out on top.

By David Greising in New York

ear in the U.S. But orange
e expanding at a much bet-
l pace thanks to O.J.'s
among adults and a fruit-
ong teenagers. PepsiCo
ger A. Enrico is banking
seas opportunities.
icana has boosted inter-
3% of sales in 1988 to 19%
ing advertising dollars and
tribution—and there's still
room. The average Amer-
s 15 gallons of O.J. per
d with six in Europe and
gallon in Asia. A victory
overseas would buoy Pepsi, which has long trailed Coke internationally.

Still, a leg up in what will now become the broader beverage wars didn't come cheap. Although Pepsi anted up $200 million less than Tropicana seller Seagram Co. initially wanted, analysts say it appears to have paid a full price. Seagram, which will use the money to fund its purchase of music company Polygram, first tried an initial public offering but abandoned that for the Pepsi offer.

In 1997, Tropicana earned $81 million on $2 billion in sales. Wall Street reckons that with Pepsi's financial and marketing powerhouse behind it, Tropicana has good long-term prospects. "It brings great brand-name recognition," says James Fleischmann, research director at pension fund TIAA-CREF, which owns 20,000 Pepsi shares. An acquirer's stock often falls the day a deal is announced; Pepsi's rose ¼ point, to 39¾.

Short term, though, the all-cash deal may call on Pepsi to sacrifice $500 million of its ongoing $3 billion stock buyback. Still, if Tropicana helps Pepsi beat Coke, that may be a small price to pay.

By Larry Light in New York

The New Rules

Mastering the Challenges of the New Econon

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E HMOs YING WOLF?

y costs will soar if patients can sue them

e battle heats up in Washing- over various versions of a Pa- ts' Bill of Rights, one idea is ving the most fire. Managed- nizations are apoplectic over that would give patients the ue them for malpractice. Un- rs, HMOs and other managed- panies are largely protected suits now.

sual alliance of the American Assn., trial lawyers, and con- ups says HMOs should be held e if a patient suffers wrongful death because a doctor-pre- edical treatment was denied. ged-care industry has sounded , saying such a right could yrocketing health-care costs. us studies suggest the cost minimal. And such suits ourage HMOs to make lth-care decisions.

BRACE. HMOs can r breach of con- heir malpractice limited by the Retirement In- urity Act of A), originally shield em- rom suits employee us. Last Sep- exas became tate to allow o sue their are providers ctice. In re- tas' managed- try predicted from a spate of n-dollar suits. s later, not one us materialized. ss, Scott & White , a large Texas HMO, is lictions of higher fees come ounced a 15% hike in pre- September and blames the gely on costs relat- w law.

The size of the rate hike is surprising, given that patient complaints in Texas have been far below expectations. Before filing suit, patients must appeal to an independent review board. Originally, the Texas Insurance Dept. predicted 4,400 complaints would be received during the first year of the program, which started last November. But by mid-June, only 109 patients had requested review of treatment-denial decisions.

HMOs argue that it's too early to say how many patients will complain. "Once enough time has passed by, we expect to see a dramatic pickup," says Jeff Kloster, general counsel for the Texas Association of Health Plans. But three studies done since 1990 in New York, Colorado, and Utah suggest otherwise. Each found that the number of actual cases of medical negligence is some 10 times higher than the number of malpractice suits filed. There's also a 1997 study by Tulane University professor Dahlia Remler, which looked at 2,000 doctors treating patients enrolled in managed care. It found that the HMOs reversed their initial denials from one-half to two-thirds of the time. The final denial rate of doctor recommendations was no more than 3% overall, and as low as 1% for hospitalization and surgical requests.

"DIFFERENT DYNAMIC." No matter, says the American Association of Health Plans, a Washington-based HMO trade group. It commissioned a study this year by the Barents Group of KPMG Peat Marwick that estimates premiums for consumers will rise by 2.7% to 8.6% if HMOs lose their malpractice exemption. The increases would cover the HMO's own malpractice insurance premiums as well as what Barents assumes will be an increase in the number of medical procedures approved by HMOs to avoid lawsuits. "A different dynamic takes effect if all of a sudden we are exposed to this dramatically broadened liability," says Richard I. Smith, AAHP's vice-president for policy.

Indeed, Scott & White President David Morehead says a July survey of its medical directors found that to avoid suits, they are approving more services faster. "A lot of care that is marginal or questionable is being approved that wouldn't have been approved prior to that law," he says. But Fort Worth attorney George P. Young says Scott & White may now just be "providing coverage that they were supposed to be providing anyway."

Reports commissioned by non-HMO groups are far less alarmed about malpractice suits. A study by Coopers & Lybrand for the Henry J. Kaiser Family Foundation, released on July 6, looked at the records of three large government health-care groups not exempt from lawsuits. All three had negligible rates of litigation, ranging from 0.3 to 1.4

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cases per 100,000 enrollees per

Coopers & Lybrand won't st neck out by estimating costs, but researchers are less cautious. A by Muse & Associates for the co lobbying group Patient Access sponsible Care Alliance (PARCA mates that the average national um would rise from zero to 1.2% could be sued. The high end range assumes increased liti which would require malpractice ance premiums for the providers, gal and damages costs. Howev study's authors say potential

Liability Costs

Some estimates of the costs of l HMOs be sued for malpracti

STUDY SPONSOR	PREMIUM INCREASE
HENRY J. KAISER FAMILY FOUNDATION	Very lo numeri estima
PATIENT ACCESS TO RESPONSIBLE CARE ALLIANCE	0-1.2%
CONGRESSIONAL BUDGET OFFICE	1.2%-
AMERICAN ASSOC. OF HEALTH PLANS	2.7%-

could be achieved if health plan medically necessary procedur might otherwise deny, thus lim higher costs of litigation.

Another study released in the Congressional Budget Offic slightly less optimistic. It estim ending the liability limits would HMO premiums by an average o 1.4%, assuming that their liabi would rise by 60% to 75%. T into account all actions an H take to limit risk, including bu practice insurance and changi view and coverage criteria.

The problem with all these that it is hard to predict future Patricia M. Danzon, professor care systems at the University sylvania's Wharton School, s people don't turn to the court they don't know they can. "A standard for liability that's rec of publicity will bring out a m volume of suits," she says. It lead to much more careful asse doctors' recommendations by

By Catherine Arnst in New Stephanie Anderson Forest with Mike McNamee in Wash

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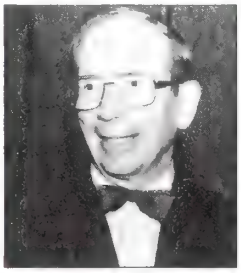

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IS ORACLE FINALLY SEEING CLEARLY?

Missteps and market shifts leave Larry Ellison and Ray Lane scrambling to halt a sli

Raymond J. Lane should have been kicking back during his June getaway to the ritzy Caribbean island of St. Bart's. But instead of deciding between mai tais and daiquiris, the president of Oracle Corp. found himself pondering a much bigger problem: how to revive Oracle's sagging business. The software maker's product-revenue growth had dropped into the single digits, profit margins were narrowing, and the stock price had stalled. Lane knew something dramatic had to be done. The conclusion he reached while sunbathing: "I had to get closer to the action."

Closer he got. Within days of returning home, Lane split Oracle's 10,000-person sales force into two teams. One team would focus on selling database software—the programs that store and retrieve corporate data and make up the bulk of Oracle's sales. The other would sell Oracle's applications, programs designed to help companies track inventory, schedule manufacturing runs, and balance the books. Lane also cut out two levels of management and placed himself directly in charge of U.S. sales operations.

Startling moves? Not at Oracle. Lane was just following the lead of his boss, Oracle Chairman Lawrence J. Ellison, who in February assumed command of the company's troubled applications division. Now, both of Oracle's top executives have their sleeves rolled up and are elbow-deep in operations. "I realized it's going to take both of us to fix this—Larry in products and me in sales," says Lane.

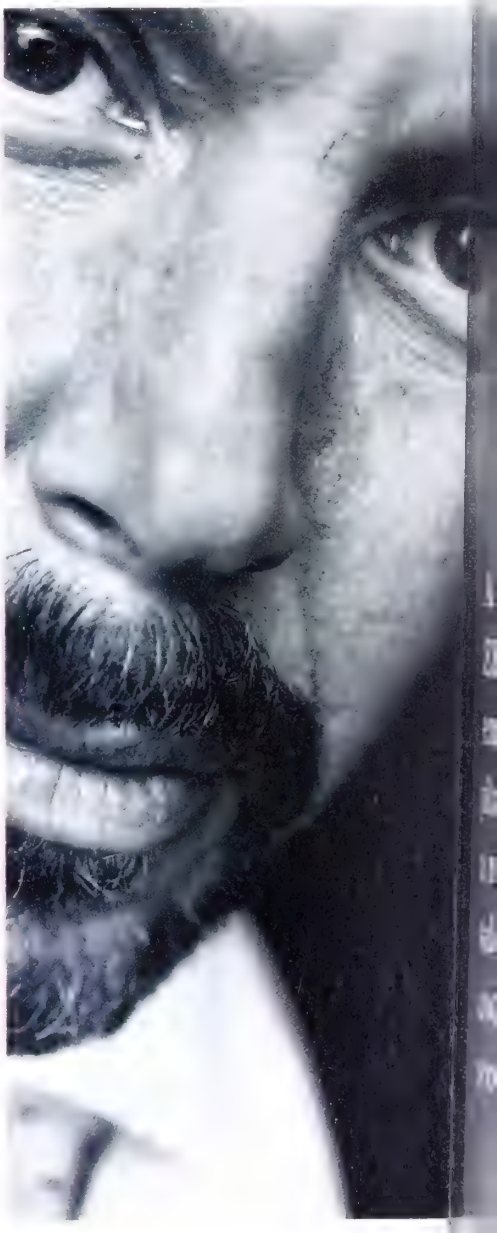
Lane and Ellison are among Silicon Valley's sharpest executives. Yet even this dynamic duo will have its hands full putting Oracle back on the fast-growth track. For years, the company has dominated the database business, commanding nearly a third of the $6.6 billion market and chalking up 30%-plus growth nearly every quarter.

But a series of missteps and market shifts has left Oracle struggling. A sweeping reorganization of the sales force last fall backfired, disrupting operations and contributing to anemic, 3% growth in database sales during the quarter ended last November. Then came the downturn in Asia, which accounted for 14% of Oracle's 1997 sales but fell to 11% of sales last year. And while Ellison was distracted by pet projects such as network computers and week-long sailing trips on his yacht, seismic shifts were occurring in the software industry—especially in Oracle's bread-and-butter database business.

GERMAN BEHEMOTH. The market for these programs began to mature, slowing to just 7% growth in 1997. At the same time, corporate customers began aiming more of their spending at Internet software and applications. Oracle began expanding into hot-selling applications years ago, but it still hasn't been able to catch up with Germany's SAP, the industry leader. SAP has $2.25 billion in applications revenue, or three times as much as Oracle's applications sales.

Now, the red flags are flying. When the company reported its yearend numbers in June, it became clear that earlier signs of a slowdown were no fluke. Even though Oracle's net income was up 13%, to $955 million (excluding acquisition costs), on a 26% gain in revenues—to $7.1 billion—most of that was buoyed by Oracle's service business. Growth of the company's crucial software sales had skidded to 9% from 26% a year earlier. Oracle's stock is flagging, too: in the mid-20s, far from its peak of 42 la

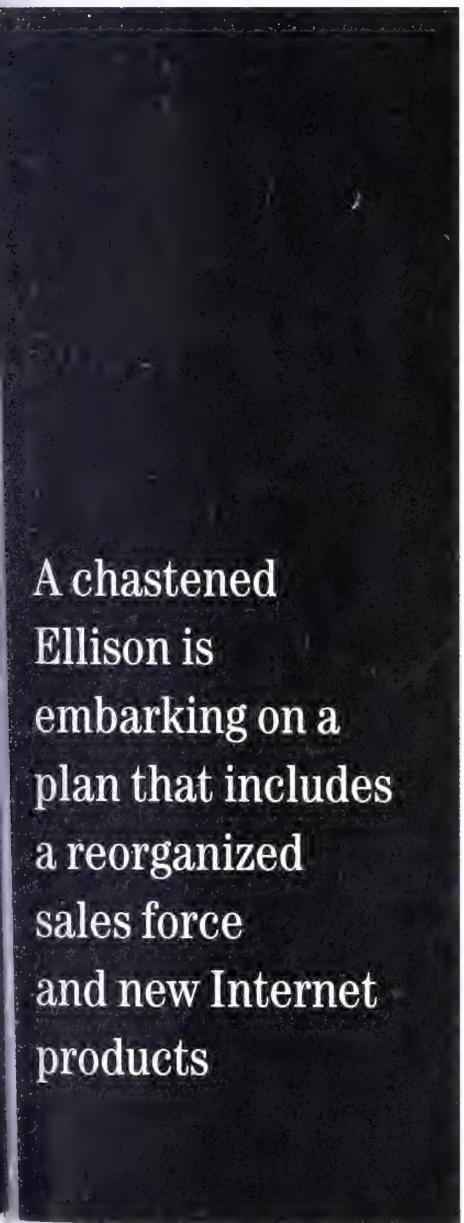
Ellison is by turns apologeti the mistakes of the past and te about Oracle's prospects for the u He concedes that he should have

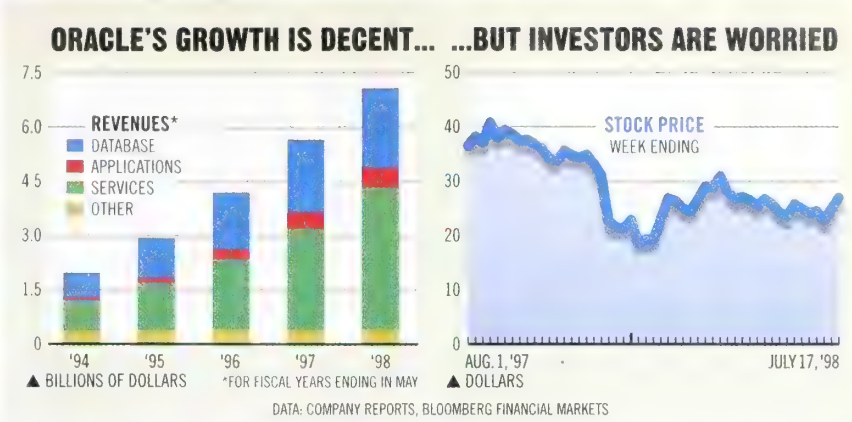


n the applications business ear- saw the problems last fall but thought I could delegate." And zes that focusing so much on computers hurt his company. ld have been talking about how es are essential for Internet ng. "It was a huge communica- ffe, and I blame myself for it," owledges.

a chastened Ellison is embark- a plan that includes a reorga- les force and a laser focus on In- computing. Rather than taking osoft Corp.'s Windows software network computer, he's launch- lizzard of Internet-ready soft- iat can be accessed from any computer. What's more, he's de- on the Net-savvy software he's omising for three years.

up is a new version of the com-





DATA: COMPANY REPORTS, BLOOMBERG FINANCIAL MARKETS

pany's applications, Oracle Applications Release 11. The software relies on Net communications and uses Web browsers for viewing information stored in corporate databases—the first enterprise application suite to do so.

ONE LANGUAGE FOR ALL. The big bang, though, is scheduled for the fall, when Oracle will release Oracle8i, the most massive overhaul yet of its database. Oracle8i is equipped with the popular Java programming language, so companies can easily build applications that fetch data with a simple mouse click and run on any type of computer through a browser. That offers potentially huge savings on programming and training. "It's the biggest change we've made to the database since we created it 20 years ago," says Ellison.

Together, the products usher Oracle into the Internet Age, but will they return the company to its former go-go growth? Chances of 30%-plus spurts are unlikely, say analysts, but they figure that the Net products, coupled with the sales revamp, could deliver healthy growth rates again. Up until now, the Internet has not driven a lot of extra demand for databases. But that could be changing with the rush to electronic commerce. "There's a latent bubble of database demand," says analyst Charles Phillips of Morgan Stanley Dean Witter, who forecasts 1999 revenue growth of 23% for Oracle.

Ellison is betting that the Internet focus will boost applications sales and help Oracle catch up with SAP. The undisputed leader, SAP had 15.6% market share last year, compared with 4.9% for PeopleSoft and 4.8% for Oracle, according to International Data Corp. What's more, in spite of the slowdown in Asia, the German juggernaut's revenues grew 60% in the first half of this year. To accelerate growth, it has doubled its field-sales organization, to 2,000 in the past two years, vs. 1,500 applications reps for Oracle. And its focus is unwavering. "Oracle does so many things," says Paul Wahl, CEO of SAP America. "For us, it's business applications, business applications, business applications. Nothing else."

Even hotter than SAP right now is PeopleSoft Inc. Its product revenues grew 76% last year, to $705 million. PeopleSoft sells a narrower range of applications, but it makes up for that with a single-minded dedication to customer satisfaction. That philosophy was key to Corning Inc.'s decision to choose PeopleSoft applications over Oracle's, even though Corning had already standardized on Oracle databases.

Oracle doesn't have to play catch-up in databases. In the market for high-powered ones, IBM and Oracle duke it out. But it's Microsoft that might end up giving Oracle fits. Microsoft has been in the database market in earnest for just three years, but it has amassed 15% of the market.

So far, Oracle has been more than Microsoft's match, beating it even in the market for databases built on top of Microsoft's Windows NT operating system. But since Microsoft can design its SQL Server database to work tightly with NT—the fastest-growing platform for database sales—it could gain an edge. And the SQL Server database is about half as expensive as Oracle's in price/performance comparisons. Soon, analysts say, Microsoft could start grinding away at the underside of Oracle's database empire.

That's another reason it's crucial for Ellison and Lane to get Oracle running like a well-oiled machine. Analysts agree that the company's products aren't the

only problem: Ellison and Lane must also fix sales and marketing. And that's not just a matter of redrawing the organization chart. It will require big changes in Oracle's notoriously combative culture so that database sales representatives are not at war with the applications staff. "They've got too many cooks trying to stir the broth and stab each other in the back at the same time," says analyst Josh Greenbaum of Hurwitz Consulting.

No wonder Lane's key move on July 8 was to separate the combatants. He divided the sales force into database and applications organizations. Now, he plans on doubling the size of the application sales force, to 3,000, by next May. He's also training them to sell applications that address business needs, such as helping a manufacturer stock enough parts in a fast-changing m

Still, Lane cautions that it coul two more years before custome gin to see Oracle as not just a t ogy supplier but a trusted part well. Guess he'd better not plan ting the beach anytime soon.

By Steve
in Redwood Shores

BEHIND THE LARRY & RAY SHOW

Fred and Ginger. Orville and Wilbur. Larry and Ray? When it comes to famous partners, in Silicon Valley at least, Larry Ellison and Ray Lane certainly qualify. The duo run Oracle Corp., the world's second-largest software maker. Ellison, the flamboyant founder and visionary, is the company's public face. When he's not sailing his yacht or flying one of his private jets, Ellison, 53, is often out promoting grand new strategies—be it network computing or interactive TV.

Lane's hobbies are more down to earth—golf and duck-hunting. And he spends his time with customers and colleagues rather than taking center stage. The 52-year-old Lane looks after sales and day-to-day operations while he painstakingly builds the organization. He is Mr. Process. While Ellison has been trying to change the computing world, Lane has been busy changing Oracle. "As a combination, they're much stronger than they are as individuals," explains Bill Marshall, an Oracle Consulting manager.

Ellison credits Lane with fixing Oracle's sales force and building its 14,000-person consulting division. He hired him from Booz, Allen & Hamilton Inc. in 1992 to run sales, and soon promoted him to president. Before Lane arrived, Oracle's hyperaggressive salespeople would sell large quantities of software at huge discounts—then ignore the new customer as they ran off to make the next sale.

Lane made the sales representatives accountable to the company rather than to their own bank accounts by doling out sales commissions over time. Now, his goal is to transform a sales force that is used to hawking database technology based on a features checklist into one that sells sophisticated information systems—then stays around to hold the customer's hand while the software is installed. "The old Oracle is dead and gone," says Lane. "We're burying it."

MR. PROCESS
While Ellison has been trying to change the world, Lane has been busy changing Oracle

The plan seems to be working—though it sometimes requires top-level intervention. A year ago, disk-drive maker Quantum Corp. was trying to negotiate a new maintenance contract. Frustrated that he was getting nowhere with underlings, Quantum Chief Information Officer Hank Delevati left a message for Lane late one day and got a call back from him at 7 a.m. the next day. L then personally negotiate new three-year deal. "In past, if Oracle had an ad tage, they wouldn't give a break," says Delevati. changed that. Now, they truly a partner."

SEPARATE TERRITORY. A how does Lane get along with his famously mercu boss? Unlike some other cle execs, Lane is not af to disagree with the cha man. "People say, 'Isn't tyrant bastard?' But I'v never had a bad day wi Larry," says Lane. Ellis doesn't try to tell Lane to do with the sales for And Ellison respects La opinion on other matter Says Ellison: "We each have ou eas where we're the expert."

Some of Lane's leverage com from the fact that a good chief ating officer is hard to find. An Silicon Valley, where talent is i highly competitive demand, La on every executive recruiter's

"The CEO doesn't have all th er in these matchups," says Sc McNealy, chairman of Sun Mic tems Inc. "They're afraid the o one will leave. You see it in th Larry compensates Ray." Lane $40 million worth of stock opti and was paid $2.3 million in sa and bonuses last year after he wooed for the chief executive's tion at Novell Inc.

This partnership of near equ has worked fairly well so far— by both cash and a spirit of ac modation. Now we'll see if it H up as Ellison and Lane face th first real crisis together.

By Steve
in Redwood Shore

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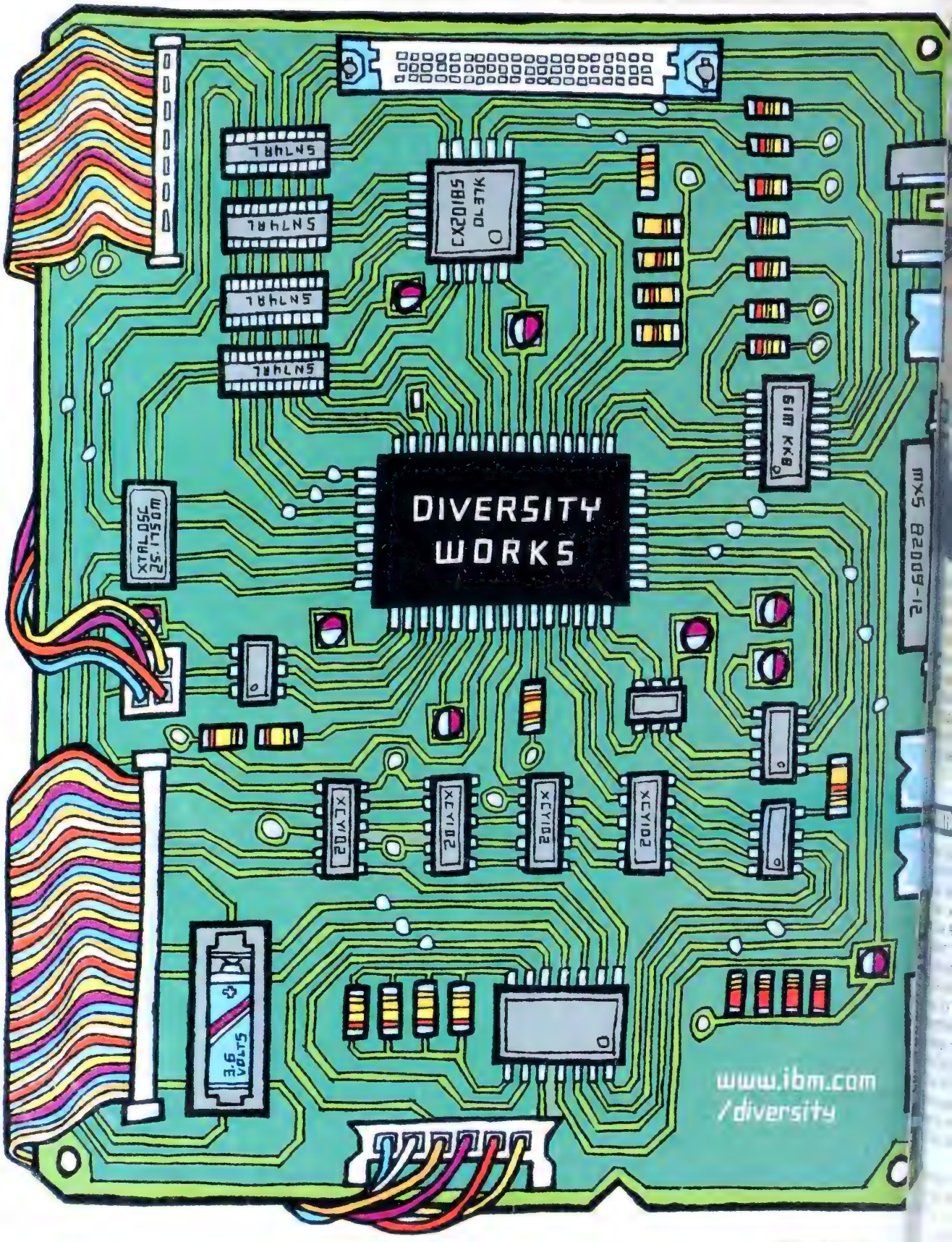

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Solutions for a small plane

BY OTIS PORT

TONS THAT COULD JUICE UP JUICE

VINES AND BRANDIES GET BETTER AS TIME GOES BY, e same might soon be true of grapefruit juice. In se of grapefruit, the secret is in the packaging. n H. Hotchkiss, a professor of food science at Cor- niversity, has devoted years of research to so- active packaging. He dreams of packages that ly hold products but also improve them.

One packaging supplier is evaluating a carton that might make grapefruit juice as popular as orange juice. The paperboard carton is lined with a cellulose polymer impregnated with naringinase, an enzyme. Developed with the help of grad student Nelda de Fatima Soares, the coating breaks down the two ingredients sible for the tartness of grapefruit juice: naringin, ral component of citrus fruits, and limonin acid, a luct of pasteurization. The cellulose absorbs the n, while the enzyme "detarts" the naringin. In few days, the packaged juice tastes sweeter than sh-squeezed kind, says Hotchkiss.

t, Hotchkiss hopes to find a sponsor for his e-killing packages. These shrink-wrap films and bags would contain antimicrobial agents to deter e of meats, cheese, and produce. *Nellie Andreeva*

ARE THESE CHIPS ON THE BALL?

HAVE THE FOLKS AT BALL Semiconductor Inc. lost their marbles? That was the reaction in 1996 when the Allen (Tex.) startup announced it planned to cover silicon balls with computer circuits. There's less snickering now.

In mid-July, Ball Semiconductor revealed it has printed crude semiconductor devices on balls 1 millimeter in diameter. "And we'll be making integrated circuits in a month or two," asserts Ram K. Ramamurthi, vice-president for research and development. "They seem to be getting on with it," says Jack S. Kilby, co-inventor of the integrated circuit.

Ball chips are the brainchild of Akira Ishikawa, a former senior manager at Texas Instruments Inc. He believes drastically cheaper ways of making chips are essential to sustain the march of semiconductor innovation. And the time is ripe, because the next generation of chip plants may cost up to $10 billion, pricing many companies out of the business.

To avoid the need for big, superimmaculate factories, Ishikawa dreamed of balls rolling through narrow tubes, so only the insides of the tubes would need to be cleaner than hospital operating rooms. The equipment for processing sturdy balls also would be cheaper than that for handling fragile dish-size wafers. As a result, the cost of a chip factory could be slashed 90%.

Since leaving TI, Ishikawa has raised $52 million—and expects to begin volume production in 2000. Whether customers will buy is the big unknown. But Ball figures it holds a trump: Its chips will be smaller than flat chips, so cell phones and other small gadgets could shed more inches. □

OVATIONS

aking plants may be pristine factories t, but they produce toxic waste. Re- at Los Alamos Na- boratory are work- substitute for the acids now utilized licon. It's based on supercritical carbon a strange fluid with ties of both a liquid . Mixed with propy- nate, a benign sol- pears to etch chips er than the acids

fans may be sur- hear that the U.S. orld cup in Paris— up for soccer-play- s, that is. In the t league, the five members of the CMUnited team from Carnegie Mellon University beat Australia in the final match, 3-1. CMU also won the competition of computer simulations, trouncing last year's champ, Germany's Humboldt University, 3-0. In the matches among larger robots, which CMU didn't enter, Germany's University of Freiburg came out on top. Next year's RoboCup will be held in Stockholm.

■ When the screen goes blank, TV sets go into a standby mode that saves electricity. Even so, they still use quite a bit of juice. Philips Electronics figures the total tab for U.S. homes is around $1 billion. So Philips has come up with a GreenChip that puts standby on standby, slashing power usage by 99%.

A SIX-LEGGED CHEMISTRY LAB

DRUG COMPANIES UTILIZE SO-CALLED COMBINATORIAL chemistry to create millions of compounds Mother Nature never dreamed of. But nature also has a few secrets up her sleeve, which could aid scientists.

In the July 17 issue of *Science*, a research team led by Cornell University chemist Frank C. Schroeder describes how the immature pupal forms of the squash beetle, *E. borealis*, secrete droplets that contain a rich brew of chemicals from glandular hairs along their bodies. Like chemists, the beetles work with a small "library" of molecular building blocks—just three closely related compounds of varying lengths.

To create the brew, cells in the bugs' glands continuously and randomly mix up different combinations of the molecules, then spin them into large polymer rings. "We don't know another biological system that achieves that sort of chemical production," says chemistry professor Jerrold Meinwald. He speculates that the bugs may require this complex mixture to hold a variety of enemies at bay. *Neil Gross*

FOR FURTHER INFORMATION: Go to Business Week Online at America Online or E-mail dtwaug@businessweek.com

EDITED BY AMY DUNKIN

BONDS: THESE WATERS ONLY LOOK CALM

INVESTING

No doubt about it—U.S. government bonds are looking good these days. With inflation quiescent, the 30-year Treasury bond is at just 5.7%, near its historic low. Many market mavens expect long bond rates to fall to 5% or below, producing tidy capital gains.

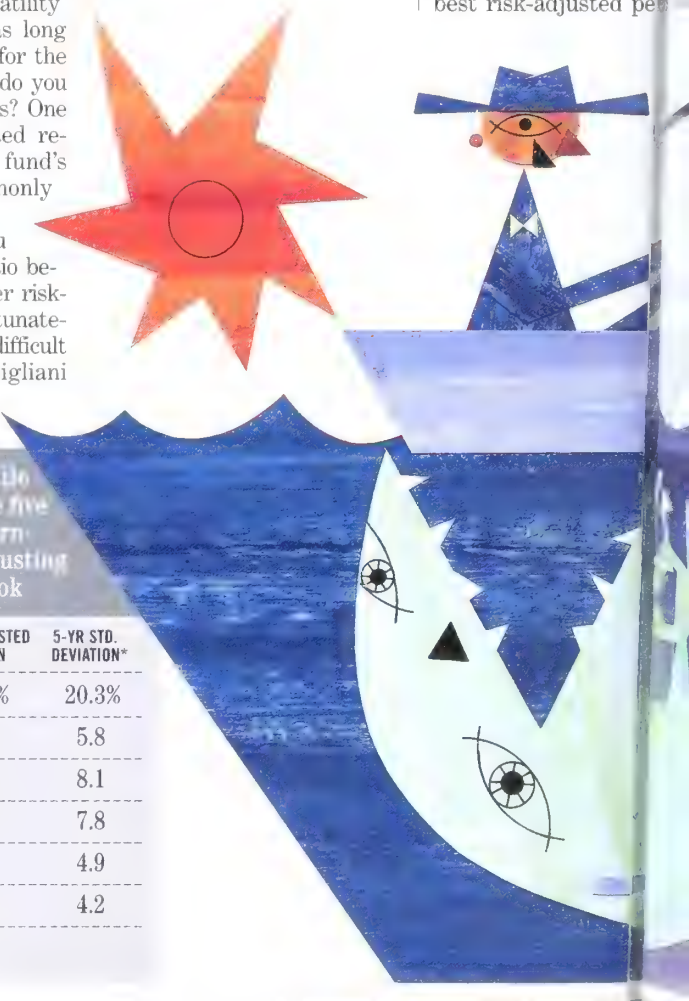
But if you think bonds are a safe haven against economic troubles in Asia or a downturn in the stock market in the U.S., you may be in for a surprise, according to a recent report by Leah Modigliani, an investment strategist at Morgan Stanley Dean Witter. In the past 20-year period, volatility in long-term U.S. government debt has steadily increased because of high inflation (chart). Bond volatility even surpassed that of the Standard & Poor's 500-stock index for the 20-year periods ended in 1996 and '97.

This is of particular concern if you're thinking of buying a long-term bond fund to diversify your portfolio and gain maximum yield. Many investors regard long-term bond funds as parking places for cash—even if the investment horizon is just one year. Morningstar estimates that long-term funds returned 7.5% over the five years ended on June 30, compared with 6.2% for intermediate funds. But the long-term funds were 38% more volatile. "If you're an investor with a one-year outlook, some long-term bond funds are much more volatile and risky than you might think," says Modigliani.

SHARPE SHOOTING. Volatility isn't necessarily bad, as long as you're compensated for the risk you take. But how do you assess the risks in bonds? One way to get risk-adjusted returns is to look at a fund's Sharpe Ratio, a commonly used measure of risk-adjusted returns. You want a high Sharpe Ratio because it denotes a higher risk-adjusted return. Unfortunately, the Sharpe Ratio is difficult to interpret. So, Modigliani and her grandfather, Franco Modigliani, finance professor at Massachusetts Institute of Technology and Nobel laureate, developed another measure of risk-adjusted performance. Called Modigliani-Modigliani, or M^2, it is a return adjusted for volatility that is measured in basis points and allows for a comparison of returns between portfolios.

M^2's aim is to be more precise than the risk-adjusted performance ratings used by Morningstar or BUSINESS WEEK but easier to understand than a Sharpe [illegible]. Nonetheless, funds with the highest Sharpe Ratios [illegible] the highest M^2 and vice versa.

We asked Modigliani [illegible] M^2 to work on long[-term] funds with the highest returns over the past years, as measured by Morningstar's Principia data (table). The one with the total return, before adjusting for risk, was American Century-Benham Target Maturities 2020. [illegible] came to the second-best performer on a risk-adjusted basis. But when the risks the fund took [illegible] American Century-Benham achieved its results with [illegible] times more volatility than the Lehman Brothers Government Bond Index, [illegible] three times more than the best risk-adjusted performer.



How Fickle Is Your Fund?

Bond funds can be just as volatile as equity funds. Here's how the five top-performing long-term government bond funds look after adjusting for the risks their managers took

	5-YR ANNUAL RETURN	RISK-ADJUSTED RETURN	5-YR STD. DEVIATION*
AMERICAN CENTURY-BEN. TARMAT. 2020	16.4%	7.6%	20.3%
WASATCH-HOISINGTON U.S. TREASURIES	8.9	7.9	5.8
VANGUARD F/I L/T U.S. TREASURIES	8.5	6.9	8.1
T. ROWE PRICE U.S. TREAS. LONG-TERM	8.2	6.8	7.8
PACIFIC ADVISORS GOVT. SECURITIES A	7.4	7.1	4.9
LEHMAN BROS. GOVT. BOND INDEX	6.7	6.7	4.2

* A measure of how much a fund's returns fluctuate from their average.

DATA MORGAN STANLEY DEAN WITTER & CO., MORNINGSTAR INC

-Hoisington U.S.
f look at the funds'
s explains why
ı Century-Benham is
ıe riskiest long-term
ds. The fund invests
upon U.S. Treasury
s and U.S. Treasury
es, and bonds that
ture in 2020. This
an extremely long
a measure of how
a bond's price is to
n interest rates. The
e duration, the more
will be affected by a
ı interest rates and,
e more volatile the
r example, when in-
ites went up in the
rter of 1996, the av-
ıg-term government
nd lost 5.6%. But
n Century-Benham
ep 16.6%, according
ngstar.
now, however,
ı Century-Benham's long duration is a plus because long-term rates have been falling. In the past year, the fund is up 61%, putting it in the top third of the entire mutual-fund universe—debt and equity.

RIDING THE CURVE. Another fund benefiting from a long duration is Wasatch-Hoisington U.S. Treasury, which produced its returns with a lot less risk. It was up 21.4% in the past 12 months with a volatility measure of 5.8, vs. 20.3 for American Century-Benham. Unlike the American Century-Benham management team, Wasatch-Hoisington co-manager V.R. Hoisington can invest in any maturity of U.S. Treasury, from six months to 30-year zeros. Since June, 1996, Hoisington has been 100% in long bonds with maturities of 26 to 30 years. "As long as inflation continues to head down and monetary policy remains as it is, we see little risk in the long bond," says Hoisington. How does he manage risk? He doesn't. Hoisington says he doesn't try to damp the volatility of his fund by hedging. "Any low risk we've had has been circumstantial," he says.

Another top risk-adjusted performer, Pacific Advisors Government Securities A (up 19.7% in the past 12 months), actively manages risk, however. Its risk-adjusted 7.1% return came with four times less volatility than American Century-Benham's. Pacific Advisors is a total-return bond fund that uses a proprietary interest-rate timing model to bet on the direction of rates. "We try to navigate the yield curve to figure out where we can get the most money for the least risk at any point in time," says Marc Kelly, co-manager of the $4.5 million fund. Kelly shortens the fund's duration when he thinks rates will rise and lengthens when he thinks they will fall. Now, he's buying bonds with an average maturity of 26 years because he sees rates heading lower.

The fund's success in managing duration helps explain why this fund has the lowest standard deviation—a measure of how much its returns vary from its long-term average—among the group of top performers. But there's another reason Pacific Advisors has done well. Kelly is permitted to invest up to 35% of the fund in the stocks of domestic and foreign utilities that have good fundamentals—and above-average dividends that have been growing. About 16.5% of Kelly's fund is in such utilities as CMS Energy, Ipalco Enterprises, and Nipsco Industries. The average yield of his domestic stock holdings is 3.3%, vs. 1.5% for the S&P 500.

EXTRA POINTS. The T. Rowe Price U.S. Treasury Long-Term and Vanguard Fixed Income Long-Term U.S. Treasury funds are other solid performers on a risk-adjusted basis—up 19.2% and 18.4%, respectively, in the past 12 months. Both are managed similarly, giving them comparable volatility and risk-adjusted returns. Neither manages duration, and their volatility is nearly twice that of the Lehman Brothers Index. But they do try to add value through yield enhancement. T. Rowe Price Manager Peter Van Dyke has invested 15% of the fund in Ginnie Mae-backed long collateralized mortgage obligations. These give him 60 to 80 extra basis points of yield over the long bonds. Van Dyke and Robert Auwaerter, manager of the Vanguard Fund, avoid buying the newest 30-year Treasuries; their yields tend to run about six to eight basis points less than more seasoned bonds because new paper is in strong demand. Like many of his bullish peers, Auwaerter is buying Treasuries with maturities of 26 to 28 years.

When you're looking at bond funds, it's critical to look beyond their total returns. M^2 isn't in wide use yet, but you can get hold of Sharpe ratios and volatility measurements for funds from Morningstar, Value Line, and many fund groups themselves. Use the tools to make sure you're paid for the risks you're about to take. *Toddi Gutner*

CHART BY ROGER PENNY

COMMENTARY

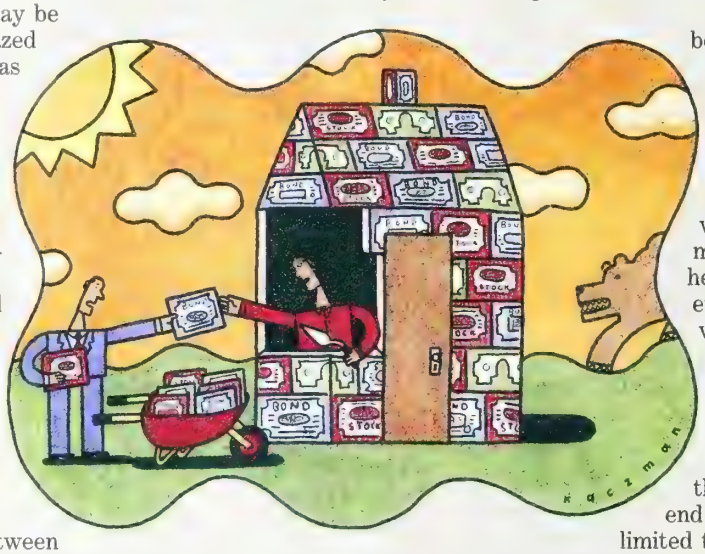
By Mike McNamee

401(k) DO-IT-YOURSELFERS COULD USE SOME HELP

Now that they've unloaded the burden of pension investment onto the workforce, employers are discovering most employees don't want to be portfolio managers. Indeed, the two key 401(k) trends of the '90s—more funds and more seminars to explain them—may be leaving workers more dazed than empowered. That has employers wondering what to do if workers blame the boss after poor 401(k) choices leave them short of a comfortable retirement.

This fear of recrimination has employers scrambling. Now, instead of just offering financial education, they're hiring people to provide actual advice. Telling employees to put 40% of a 401(k) into Vanguard Index 500 is a big improvement on educating folks on the trade-off between risk and return. But this still leaves workers on their own to carry out the advice—and to adjust for shifting markets, which can distort even the most carefully built portfolio (table).

SAFE HAVEN. There's another alternative, and it ought to be a core option in every 401(k) plan. It goes by several names: lifestyle fund, multifund, or fund of funds. But it represents a partial return to the days when companies provided professional pension management. For the millions of workers too scared, lazy, or busy to run their own investments, a multifund can offer a safe haven. Choose such a fund—keyed to your age or risk tolerance—and you'll know a pro is maintaining a balanced portfolio of U.S. and global stocks, corporate and government bonds, and cash.



How might you benefit from a multifund? Looking at the 1997 returns earned by 296 participants in four employers' 401(k) plans, Robert Markman, president of Markman Capital in Minneapolis, found 55% could have done better with the average conservative multifund, which earned 13.4%. Aggressive multifunds, at 18.4%, outperformed 78% of the do-it-yourself accounts. Some of the worst performers? Software engineers and doctors who actively managed their accounts, timing the market and chasing hot funds. Both winners and losers were less diversified, and thus exposed to more risk, than they would have been in multifunds.

Markman is hardly a neutral observer: He manages Markman MultiFunds, which builds portfolios using stock, bond, and money-market funds from several families. But other research seems to back his contention that a 401(k) education program doesn't turn you into Warren Buffett. For example, workers invest a third of 401(k) assets in their companies' shares, meaning they're betting their jobs and retirement on the fate of a single stock.

Ignorance hasn't hurt in a booming stock market. The median 401(k) portfolio earned 117% from '8[illegible] '96, meaning the collective wisdom of 401(k) amateurs nearly matched that of pension managers who earned 119%. But the median portfolio is now too heavy with stocks. "The inevitable market correction will be the Waterloo of the whole 401(k) industry," says Peter Starr of consultants Cerulli Associates.

The emerging 401(k) advice industry argues that multifunds are a cop-out because they tend to be limited to options for conservative, moderate, and aggressive investors. "Would you shop at a shoe store that only offers size 3, 7, and 11?" asks Scott Lummer, chief investment officer for 401k Forum, a Net-based investment counselor in San Francisco.

But even custom-tailored advice may not be the answer. Surveys by Boston researchers Dalbar Inc. find many workers are challenged just to decode their 401(k) statements. Even well-run 401(k) will have to recognize these limitations. Already, some plans such as Fuji Film's feature "tiering"—brokerage accounts to satisfy the stock-pickers, eight or nine mutual funds for the mix-and-match mavens, and funds of funds for the third group of employees who don't want to be bothered.

The rise of 401(k)s requires workers to pony up not only the money they'll need for retirement but also the time and effort to fathom Wall Street's mysteries. For vast numbers, that's one burden too many. Give them the simple multifund solution.

McNamee covers economic and investing issues in Washington.

Is Your Portfolio Out of Shape?

If you allocated your assets back in 1993 and then did nothing, the bull market has changed the composition of your portfolio—and its riskiness.

	ASSET ALLOCATION 1993	1998
LARGE-CAP STOCKS	45%	60%
SMALL-CAP STOCKS	15%	15%
INTERMEDIATE-TERM BONDS	25%	16%
CASH	15%	9%
RISK OF LOSING MONEY	22%	25%

DATA: IBBOTSON ASSOCIATES

If you didn't need to know this stuff,

we wouldn't interrupt your weekend.

Somewhere right now, business news is breaking that will have an impact on your life. That's why there's "This Week in Business" on PBS. Join host Sheilah Kast for the business news you absolutely need to know.

This Week In Business

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A BLIZZARD OF WEATHER SITES

Think of the trouble Dorothy could have avoided if only she had access to the World Wide Web. With a click of her mouse, she would have gotten wind of any impending twisters and skipped an unplanned flight to Oz.

Today, you can use your personal computer to track tornadoes, inspect Doppler radar, and pore over historical weather data. If you're a true weather buff, you can visit Web sites to buy everything from digital weather stations to maps that chart the path of hurricanes.

Fortunately, getting the current weather just about anywhere on earth is a breeze. Most major Web sites, including AccuWeather, USA Today Weather, Weather Underground (www.wunderground.com), and weather.com, supply local and international climate conditions and two- to five-day forecasts (table).

DETAILS, DETAILS. The best sites I've sampled go beyond telling you whether you'll need a sweater or galoshes. At weather.com, run by cable TV's Weather Channel, areas are divided into boat and beach, gardening, and aviation, to name a few. In the golfer's guide area, meteorologist Bruce Edwards selects places that promise great golfing conditions this time of year. Bend, Ore., and Cape Cod, Mass., were two locales that made the cut. You can also find forecasts for communities holding PGA and LPGA tournaments.

Weather.com's travel section, meanwhile, lets you check delays at the nation's 40 busiest airports and gives you the current weather along major U.S. highways. By clicking on Interstate 80, for example, I was able to peek at conditions at two dozen towns listed between San Francisco and Caldwell, N.J. You can get five-day forecasts by clicking on any of the cities along the route.

I liked the simple design of USA Today's weather site. A colorful U.S. weather map is prominently displayed, resembling the paper's weather page. On the left side of the screen, you can click on beach guides, ski reports, UV forecasts, and other topics. One useful feature was a mosquito-infestation forecast. And if you're puzzled by such terms as heat index or Northern Lights, the Ask Jack section allows you to fire off a message to Jack Williams, USA Today's weather editor. On the downside, my local New York City forecast was not as current as data presented elsewhere.

That wasn't the only glitch I encountered. Intellicast (www.intellicast.com) displays the temperature of foreign cities in degrees Celsius—confusing unless you remember conversion formulas from high school. Most other sites use Fahrenheit, or both. Moreover, it may be steamy across the country this summer—but it's not 999 degrees in Atlanta or Pittsburgh, as indicated in one area of the Intellicast site I landed on.

TECHNOLOGY

If timeliness counts, you may want to subscribe to the premium services at the AccuWeather Web site. The Personal AccuWeather service costs $39.95 a year or $4.95 a month and includes real-time loc pler radar suring the ty and sp moving such as pr tion), satel formation, tailed hour- forecasts. I thing to d that there's chance of r another to that showe likely to h p.m. Premi scribers als access to e 10-day loc casts, althou Weather P Joel Myers teorologist, that lon forecasting spotty.

If you're who likes to figure weather yourself, you weather stations that temperature, humi wind chill at AccuW online store. But a m plete selection of we lated gizmos can be the Weather Affe (www.weatheraffect 800 317-3666). Produ from $60 emergency radios and $100 anemometers for rea speeds to $75 sun $319 rooftop weath You can also downl ry of weather-orient ware programs at Net (cirrus.sprl.u wxnet). These incl tal Atmosphere fo ing weath and Trac Eye, whic follow seve Between al sites and gets and you'll be a a decent whether th clouds on zon are t dangerous a mere shower.

Edwa

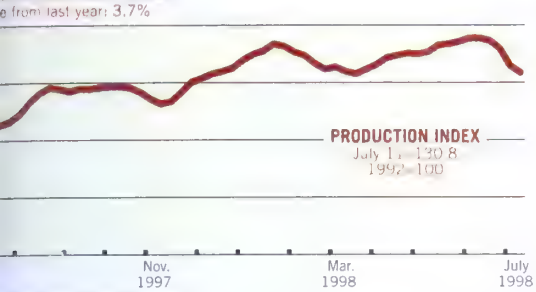
The Climate on the Web

SITE (HTTP://)	COMMENTS
ACCUWEATHER www.accuweather.com	Free E-mail of local forecasts. Premium subscription service provides hour-by-hour and 10-day forecasts
NAT'L WEATHER SERVICE www.nws.noaa.gov	Current conditions, severe storm warnings, links to historical data
USA TODAY WEATHER www.usatoday.com	Site includes beach weather guide, ultraviolet forecasts, and questions for weather editor Jack Williams
WEATHER.COM www.weather.com	Weather Channel service features sections on business and leisure travel, health and allergies, and a glossary

siness Week Index

CTION INDEX

e from last week –0.5%
e from last year: 3.7%



ex, s.a 4-week moving average

ction index continued to fall in the week ended July 11. Before of the four-week moving average, the index climbed to 131, from e previous week. After seasonal adjustment, truck production was %, as the strike affecting General Motors continues. Electric power lown, but with the heat wave hovering across most of the U.S., it's unce back up. Output of steel, autos, oil, coal, lumber, and rail sted gains.

ex, copyright 1998 by The McGraw-Hill Companies

NG INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
RICES (7/17) S&P 500	1186.75	1164.33	29.7
TE BOND YIELD, Aaa (7/17)	6.58%	6.49%	–8.0
UPPLY, M2 (7/6) billions	$4,213.7	$4,192.7r	7.5
LAIMS, UNEMPLOYMENT (7/11) thous	336	394r	–2.3
E APPLICATIONS, PURCHASE (7/17)	255.0	262.5	22.4
E APPLICATIONS, REFINANCE (7/17)	1,292.2	1,305.5	138.1

Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage sn. (Index: March 16, 1990=100)

EST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
FUNDS (7/21)	5.51%	5.45%	5.44%
IAL PAPER (7/21) 3-month	5.50	5.49	5.54
ITES OF DEPOSIT (7/22) 3-month	5.60	5.59	5.57
RTGAGE (7/17) 30-year	7.07	7.03	7.65
LE MORTGAGE (7/17) one-year	5.82	5.78	5.81
7)	8.50	8.50	8.50

ederal Reserve, HSH Associates, Bloomberg Financial Markets

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (7/18) thous. of net tons	1,962	2,010#	–4.2
AUTOS (7/18) units	74,416	33,073r#	–28.2
TRUCKS (7/18) units	68,974	22,707r#	–16.7
ELECTRIC POWER (7/18) millions of kilowatt-hrs	77,565	73,856#	0.1
CRUDE-OIL REFINING (7/18) thous. of bbl./day	15,675	15,601#	5.1
COAL (7/11) thous. of net tons	19,270#	18,122	0.5
LUMBER (7/11) millions of ft.	464.2#	391.3	–3.3
RAIL FREIGHT (7/11) billions of ton-miles	24.3#	23.5	0.0

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPA1, SFPA2, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (7/22) $/troy oz.	293.950	293.150	–9.5
STEEL SCRAP (7/21) #1 heavy, $/ton	130.50	130.50	–3.0
COPPER (7/17) ¢/lb.	79.0	75.4	–29.5
ALUMINUM (7/17) ¢/lb	63.0	62.0	–16.0
COTTON (7/18) strict low middling 1-1/16 in., ¢/lb.	73.66	77.01	2.8
OIL (7/21) $/bbl.	13.53	14.43	–27.9
CRB FOODSTUFFS (7/21) 1967=100	229.16	227.69	–4.0
CRB RAW INDUSTRIALS (7/21) 1967=100	296.90	294.45	–10.8

Sources: London Wednesday final setting, Chicago market, *Metals Week*, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (7/22)	140.98	140.67	115.76
GERMAN MARK (7/22)	1.79	1.80	1.82
BRITISH POUND (7/22)	1.64	1.63	1.68
FRENCH FRANC (7/22)	6.00	6.04	6.14
ITALIAN LIRA (7/22)	1766.0	1776.2	1773.0
CANADIAN DOLLAR (7/22)	1.50	1.49	1.38
MEXICAN PESO (7/22)	8.865	8.850	7.834
TRADE-WEIGHTED DOLLAR INDEX (7/22)	114.0	114.0	105.3

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

n the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense =Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

E WEEK AHEAD

HOME SALES

ly 27, 10 a.m.EDT ▶ Existing ably sold at an annual rate of 4.8 une, says the median forecast of surveyed by Standard & Poor's ion of The McGraw-Hill Compa- s totaled 4.82 million in May.

CONFIDENCE

ly 28, 10 a.m.EDT ▶ The Confer- s index of consumer confidence d to 136 in July, down from a 37.6 in June.

OODS ORDERS

July 29, 8:30 a.m.EDT ▶ New by durable-goods manufacturers probably fell 0.3% in June, after falling 2.6% in May. Weak exports are offsetting gains in domestic demand.

EMPLOYMENT COST INDEX

Thursday, July 30, 8:30 a.m.EDT ▶ The S&P MMS forecast calls for a 0.8% advance in employment costs in the second quarter, a bit faster than the 0.7% increase in the first quarter. The projection implies that the total costs of wages and benefits grew 3.4% in the second quarter from a year ago.

GROSS DOMESTIC PRODUCT

Friday, July 31, 8:30 a.m.EDT ▶ The economy grew at an annual rate of just 1% in the second quarter, says the median forecast of S&P MMS economists. But the lowest forecast expects that real GDP shrank at a 2% annual rate, with the economy no doubt brought down by a wider foreign-trade deficit and slower inventory growth. Consumer spending probably surged at about a 5% pace last quarter. Real GDP grew at a torrid 5.4% clip in the first quarter. However, this release will contain benchmark revisions to historical GDP data, so the 5.4% surge may be revised lower.

NEW HOME SALES

Friday, July 31, 10 a.m.EDT ▶ New single-family homes probably sold at an annual rate of 880,000 in June, down from a record sales pace of 890,000 in May.

This Week, Online

Business Week presents frequent live conferences and chats on America Online–your opportunity to ask questions about timely topics.

BusinessWeek ONLINE

Sunday

How did Kendle International hit the top of BW's Hot Growth Companies list? Ask CEO Candace Kendle Bryan in this BW Enterprise chat. **July 26**
9 p.m. EDT

Tuesday

Standard & Poor's analyst Robert M. Gold will diagnose the outlook for health-care stocks, as part of the new BW-S&P chat series. **July 28**
4:30 p.m. EDT

Thursday

How to pick stocks: S&P sector strategist Sam Stovall comes back for more of your questions in BW Online's weekly investment conference. **July 30**
9 p.m. EDT

AOL keyword: BW Talk

Transcripts of all conferences are available for downloading from the BW Online area on AOL soon after each event.

For a free trial diskette including 50 free hours on AOL, call 1-800-641-4848 and mention Business Week.

AMERICA Online

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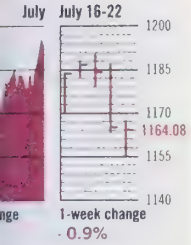

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would soon raise in-
s, his comments led
conclude that lower
not in the cards, ei-
as, the battered Hong
. market continued to
g 0.4% for the week.
46.4% over the last

U.S. MARKETS	Latest	% change Week	Year
Dow Jones Industrials	9128.9	–1.1	12.9
NASDAQ Combined Composite	1969.8	–1.2	25.6
S&P MidCap 400	364.9	–1.9	18.8
S&P SmallCap 600	188.2	–3.1	11.9
S&P SuperComposite 1500	246.9	–1.1	23.3

SECTORS	Latest	% change Week	Year
Bloomberg Information Age	372.3	–0.3	25.8
S&P Financials	141.9	–2.6	34.0
S&P Utilities	241.7	–0.6	22.3
PSE Technology	359.4	–1.4	10.7

FOREIGN MARKETS	Latest	% change Week	Year
London (FT-SE 100)	5989.6	–2.6	22.9
Frankfurt (DAX)	6110.7	0.0	38.7
Tokyo (NIKKEI 225)	16,293.1	–1.9	–19.1
Hong Kong (Hang Seng)	8420.7	–0.4	–46.5
Toronto (TSE 300)	7349.9	–0.5	8.6
Mexico City (IPC)	4564.8	–0.6	–3.7

FUNDAMENTALS	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.34%	1.32%	1.60%
S&P 500 P/E Ratio (Last 12 mos.)	27.8	27.8	23.4
S&P 500 P/E Ratio (Next 12 mos.)*	22.4	22.7	19.0
First Call Earnings Surprise*	2.32%	2.40%	2.55%

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 200-day average	1038.1	1033.6	Positive
Stocks above 200-day average	48.0%	50.0%	Neutral
Options: Put/call ratio	0.46	0.45	Negative
Insiders: Vickers Sell/buy ratio	1.50	1.65	Positive

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS	Last month %		Last 12 months %
Communications Equip.	21.9	Specialty Appar. Retailers	98.3
Photography/Imaging	20.6	Broadcasting	97.1
Pollution Control	16.5	Homebuilding	75.4
Invest. Banking/Brkrge.	16.0	Automobiles	75.0
Broadcasting	15.8	Long–Dist. Telecomm.	69.9

WORST-PERFORMING GROUPS	Last month %		Last 12 months %
Engineering & Constr.	–12.7	Metals	–43.6
Oil & Gas Drilling	–12.5	Oil & Gas Drilling	–42.6
Machine Tools	–11.4	Engineering & Constr.	–33.7
Furnishings & Appliances	–8.9	Gold Mining	–27.0
Oil Exploration & Prod.	–8.9	Leisure Time	–25.2

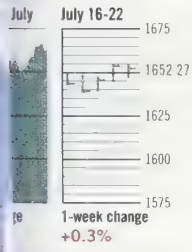
BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness	Price	1-month change
Camco International	74 15/16	– 13/16
General Re	252 7/16	–7 1/16
Berkshire Hathaway-A	75,000	–2500
BellSouth	67 11/16	– 9/16
Berkshire Hathaway-B	2508	–87
AT&T	58 9/16	–4 1/2

Decline ahead? Stocks with most significant selling on price strength	Price	1-month change
Microsoft	112 13/16	17
WorldCom	56 1/8	8 9/16
Cisco Systems	98 15/16	14 5/16
Dell Computer	110 7/8	23
Excite	48 3/4	9
Tellabs	89	23

T RATES

IY BOND INDEX



erg Financial Markets

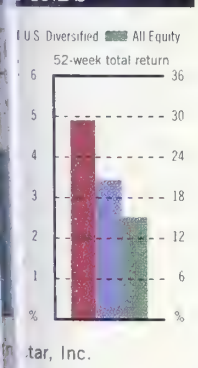
KEY RATES	Latest week %	Week ago %	Year ago %
MONEY MARKET FUNDS	5.10	5.10	5.16
90-DAY TREASURY BILLS	5.06	5.14	5.20
6-MONTH TREASURY BILLS	5.06	5.04	5.18
1-YEAR TREASURY BILLS	5.35	5.35	5.52
10-YEAR TREASURY NOTES	5.45	5.48	6.14
30-YEAR TREASURY BONDS	5.68	5.70	6.42
LONG-TERM AA INDUSTRIALS	6.31	6.32	6.90
LONG-TERM BBB INDUSTRIALS	6.76	6.78	7.24
LONG-TERM AA TELEPHONES	6.66	6.71	7.13

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond		30-yr. bond	
	Latest week	Last week	Latest week	Last week
GENERAL OBLIGATIONS	4.43%	4.43%	4.98%	4.98%
PERCENT OF TREASURIES	81.26	80.89	87.67	87.34
TAXABLE EQUIVALENT	6.42	6.42	7.22	7.22
INSURED REVENUE BONDS	4.58	4.58	5.18	5.18
PERCENT OF TREASURIES	84.01	83.63	91.19	90.85
TAXABLE EQUIVALENT	6.64	6.64	7.51	7.51

FUNDS



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EQUITY FUNDS

Leaders Four-week total return	%	Laggards Four-week total return	%
Matthews Korea I	32.3	Fidelity Sel. Energy Serv.	–15.5
American Heritage	20.3	Rydex Energy Svcs. Inv.	–14.0
ProFunds UltraOTC Investor	19.2	Lighthouse Contrarian	–12.7
Pioneer India A	17.6	Oppenheimer Real Asset B	–11.7
Montgomery Global Comm. R	15.9	Potomac OTC/Short	–9.6

Leaders 52-week total return	%	Laggards 52-week total return	%
Transamerica Prem. Sm. Co.	75.3	Lex. Crosby Sm. Cap Asia	–65.3
Transamerica Prem. Agg. Gr.	66.5	Montgomery Emerg. Asia R	–63.8
Weitz Hickory	65.3	Guinness Flgt. Asia Sm. Cap	–63.4
Flag Investors Communs. A	64.7	Morg. Stan. Inst. Asia Eq. A	–61.1
Fidelity Select Brokerage	62.3	Morgan Stan. Asian Grth. C	–60.1

EQUITY FUND CATEGORIES

Leaders Four-week total return	%	Laggards Four-week total return	%
Communications	9.5	Natural Resources	–4.1
Japan	8.3	Small-cap Value	1.3
Technology	7.5	Mid-cap Value	1.7
Foreign	7.5	Utilities	2.3
Latin America	7.4	Large-cap Value	2.3

Leaders 52-week total return	%	Laggards 52-week total return	%
Communications	43.8	Pacific/Asia ex-Japan	–51.3
Financial	34.7	Diversified Pacific/Asia	–38.5
Europe	33.6	Precious Metals	–30.7
Large-cap Growth	30.4	Diversified Emerging Mkts.	–27.2
Utilities	27.5	Japan	–23.6

market close Wednesday, July 22, 1998, unless otherwise indicated. Industry 500 companies only. Fundamentals, technical indicators, Bloomberg money flow analysis, and mutual fund returns are as of July 21. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

PHOTO BY ROBERTO MENABEM

SAVE SOCIAL SECURITY FIRST

Call it the politics of plenty. After years of cut, cut, cut, Washington is now back to give, give, give. The Congressional Budget Office just raised its estimate of the surplus to $1.61 trillion over the next 10 years. This bonus is tempting lawmakers to shower their contributors and constituents with all kinds of goodies, especially since there's a congressional election this fall. There is, after all, plenty to go around. Right?

Not exactly. Returning "excess" dollars to taxpayers is a great idea. But the hard truth is that all the surplus is being generated by Social Security itself. Over the next 10 years, the Social Security system's revenues will outrun its outlays by $1.62 trillion. That means that the rest of the government will actually run about a $10 billion deficit over the same period.

There is something obscene about politicians running around frittering away Social Security money when the system itself faces a serious long-term deficit. Every penny of that $1.62 trillion of surplus—and a lot more—will flow out as benefits in the years ahead when baby boomers start retiring. Saving Social Security for everyone is a lot more important than snipping taxes here and there for a handful of key political constituencies, Democratic or Republican. Poll after poll shows that the vast majority of Americans believe that a solvent retirement fund is far more important than another tax cut they can spend.

Washington should listen. Inadequate funding for Soc curity remains one of the last great socioeconomic pr (along with health care and education) afflicting the c Despite pressure to deliver tax cuts to make some happy before the Nov. 3 election, Congress should hold spending the new surplus. Indeed, a new bipartisa mission on the future of Social Security, such as t headed by Alan Greenspan in the early 1980s, is in o

The good news is that the budget surplus projected CBO may be way too small. The CBO bases its projecti $1.61 trillion surplus on an assumption that the ec will grow at a conservative rate of 2.16% over the n years. What if the economy grows faster? Given the a technology-driven, globalized economy, odds are t U.S. actually will grow at a 2.5% to 3% rate over t decade. That should generate an extra $1 trillion or m even that amount, thrown into Social Security coffe barely dent the retirement deficit that looms when b start leaving the workforce.

Washington should be bolstering Social Security that day of reckoning. It can do so in several ways. ample, it can use the surplus to establish individual S curity accounts for investing in stocks and bonds. can invest the surplus itself. The real national debat be over these options, not how to squander the m playing politics.

GIVE THE IMF ITS DUE

When it comes to new U.S. funding for the International Monetary Fund, Representative Richard K. Armey is right on many points but wrong on the key one. The House majority leader from Texas is absolutely correct in criticizing the IMF's penchant for seeking higher taxes from every country it bails out. He could even go further and say the IMF's demands for higher interest rates everywhere, every time, are bad policy too. Where Armey errs is in trying to punish the IMF by starving it of money. It's better for Washington to pressure IMF officials to switch from austerity policies to pro-growth ones. It's truly a bad idea to kill off the only global institution operating much like a central bank in a world made turbulent by the spread of market capitalism.

The fact is that intense criticism already has made the IMF change course in Asia. The IMF is letting Korea and Thailand lower interest rates and boost government spending to spur growth. That's a tacit recognition that the IMF misread the Asian financial crisis last year. Its initial demands for tight monetary policy and fiscal restraint helped turn a serious financial crisis into an economic nightmare. The Asian flu was brought on by private-sector overborrowing and overbuilding. Unlike Mexico, Asia had o ments with budget surpluses and high savings rat the IMF should encourage even more easing so the e will begin growing again. But the calls for a policy being heeded.

What Armey and other IMF critics are missing i ganization's evangelical role in spreading market c Misguided though the IMF may be in monetary policy, it is doing Adam Smith's work in deman client countries open their economies. In Russia, I Korea, and elsewhere, it requires the end of m transparency in banking, accountability within cor and foreign investment in exchange for emerger These are the building blocks of a market econo gressional critics, quick to blast the IMF for its polic are silent when it comes to applauding its success.

It's time for Congress to declare victory and a the IMF funding. Half the world is making a hard from communism and state capitalism to a market It's in everyone's interest, including that of the wor exporter, the U.S., to back the one internationa institution that can smooth the bumps along the w

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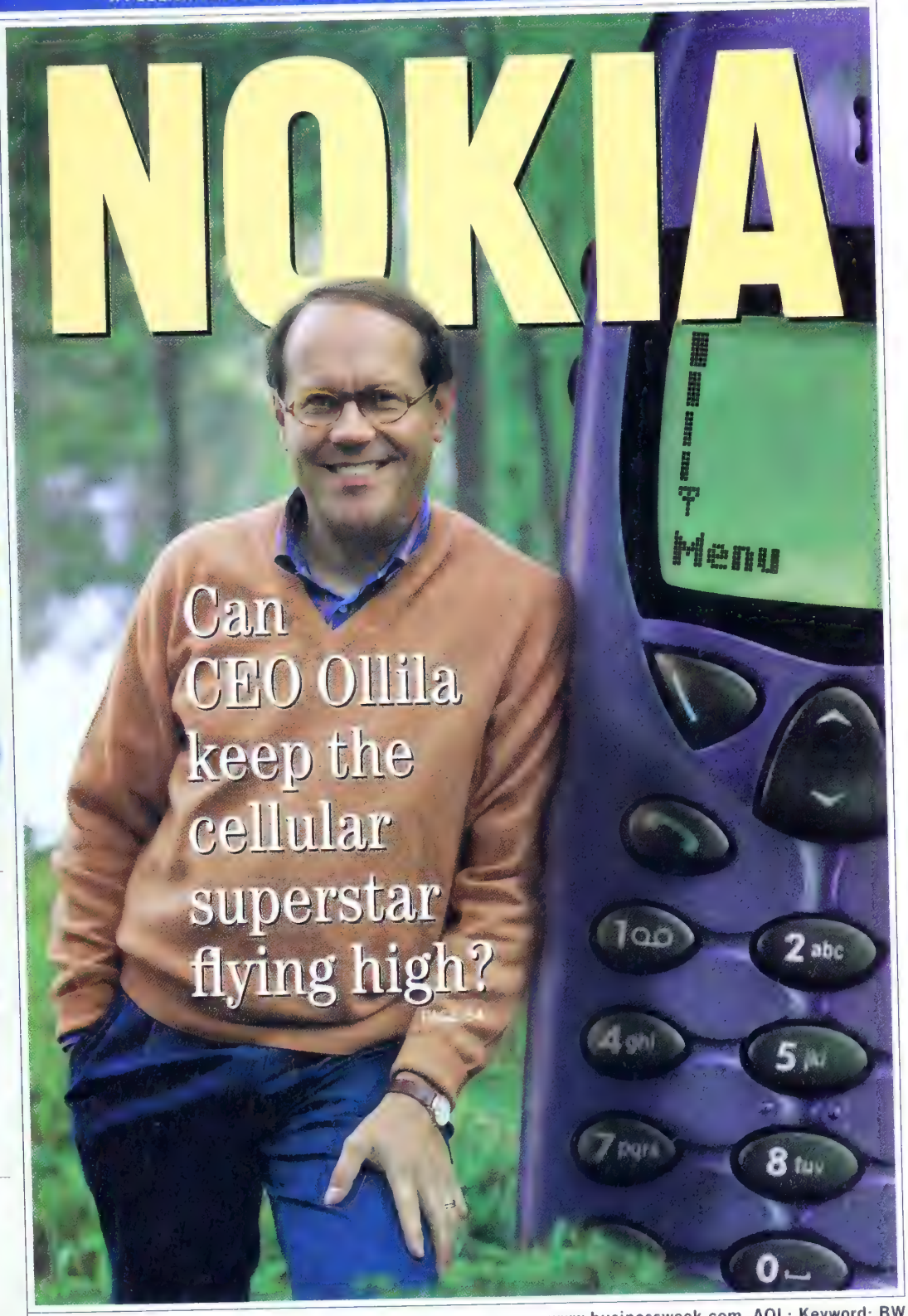

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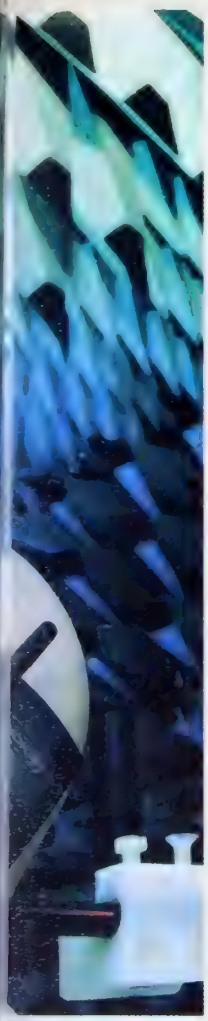

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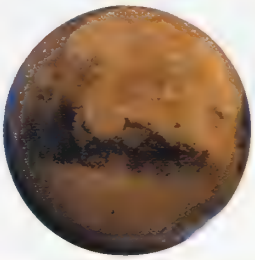

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Up Front

EDITED BY ROBERT McNATT

TALK SHOW "A boring end to a bad mystery novel."

—Headline in the national Japanese paper Asahi Shimbun *describing the election of Keizo Obuchi to the presidency of th ruling Liberal Democratic Party*

PAPER PLAYS

WHY PEROT MAY GO WITH AN IPO

SERIOUS MONEY: *A $1.5 billion value*

TEXAS BILLIONAIRE AND two-time Presidential contender Ross Perot may finally be ready to take his company, Perot Systems, public. Perot has lined up Morgan Stanley Dean Witter and four other firms to sell stock in the tech-services outfit, probably in the fall, industry sources told BUSINESS WEEK. A banking source familiar with the deal says the stock could sell at $12 to $15 a share, which would value the firm at about $1.5 billion.

Perot controls 42% of the 10-year-old company, which is projected to have $944 million in revenues this year. He was named interim CEO last November. General Counsel Peter Altabef now says that Perot, 67, is "the full-time CEO." Neither Altabef nor Morgan Stanley would comment on the initial public offering.

Perot had worried about rising expenses at the company, say former employees. First-quarter operating margins of 5.3% were below the 7.7% figure at rival EDS, which Perot founded and sold to GM in 1984. Perot Systems is "struggling to make serious money," says George Logemann, a consultant at Yankee Group. Perot told BW in late 1997: "A company should never go public until you know absolutely that you can produce continued growing earnings." Maybe that time has come. *Wendy Zellner and Linda Himelstein*

THE LIST RANK HAS ITS PRIVILEGES

What are the most common perks? Top managers often receive a supplemental executive retirement plan (SERP). This sweetener generally kicks in for those making more than $160,000.

SERPs are so popular that even smaller companies must offer them or risk losing managerial talent.

PERKS	PORTION OF COMPANIES THAT PROVIDE THEM
SUPPLEMENTAL RETIREMENT	60.4%
LEASED CAR	57.4
MOBILE PHONE	45.0
FREE MEDICAL EXAMS	44.3
GOLDEN PARACHUTES	43.0
EMPLOYMENT CONTRACTS	34.2
COUNTRY CLUB MEMBERSHIP	33.6
FIRST-CLASS AIRFARE	30.2

DATA COGPERS & LYBRAND

GREEN STREETS

BEAN FIGHT ON CAPITOL HILL

PUT A SOYBEAN IN YOUR tank? That prospect took a big step closer to reality in mid-July, when the Senate voted to designate B20, a blend of 20% soybean oil and 80% diesel fuel, as an official "alternative fuel." But the move is also setting off a heated controversy.

B20, promoted by energy companies and by soybean growers and processors, can be used in diesel engines and will cut pollutants by as much as 30%. But it costs 35¢ a gallon more than regular diesel. Federal mandates say, however, that government fleets must have a certain percentage of "alternatively fueled" vehicles. So cities and agencies figure using B20 in existing buses is still cheaper than buying regular ones that run on, say, natural gas.

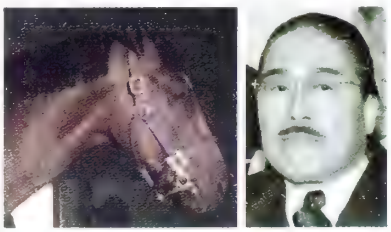
But the Energy Dept. says B20 does not really re petroleum, as the mar require. That de prompted the congres end run. So natural-ga vocates are opposing nation in the House. Ap ing B20 would "undermi

demand for true, altern fueled vehicles," argue san Jacobs of the Na Gas Vehicle Coalition. bean forces, it seems, for a long battle. *John*

SPORTS BIZ

POWERFUL YEN FOR HORSES

THOROUGHBRED LOVERS from Japan weren't supposed to be a factor at the mid-July Keeneland auctions in Lexington, Ky. The weakened yen was expected to take its toll. So leave it to Fusao Sekiguchi to upset the conventional wisdom by spending $4 million on a colt—the most paid at the prestigious auction since 1985.



BETTING ON THE BAY: *Sekiguchi*

The sixtyish, ponytailed Sekiguchi is the founder of Meitec, a Tokyo soft maker and high-tech agency. With three sons running the business, his sion has become the horses he keeps at his sp near Tokyo. Most of have first names patte after his—Fusaichi.

Sekiguchi is a self- man, says his trainer, John War unlike the other nese at Keeneland. bought through s cates, he was pers ly involved. He ha outbid his compat and everyone else "I was just inspire him," Sekiguchi sa his unnamed bay colt, by Mr. Prospector. Sekig purchase helped boost auction's total take to million, 15% more than year's figure. After the tion, Sekiguchi and War to inspect thoroughbre Ireland. *Jame*

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Up Front

WORKING GIRL: *Melanie Griffith, Sigourney Weaver*

GENDER GAPS

MORE CRACKS IN THE GLASS CEILING

WATCH OUT, GUYS. EVER SO slowly, the women are gaining on you. Although female managers still earn less than men do, the compensation gap in base pay is narrowing, thanks to more rapid pay hikes for women than for their male counterparts.

According to a recent survey of 4,500 executives by the American Management Assn., women's salaries in 1997 averaged $64,900, a 55% increase since 1990, while men's pay climbed only 47%, to $103,600. So women, who made 60% of what men made in 1990, now make 63% of what male managers do. The AMA says women are broadening their skills and seeking higher-paying jobs. So the pay gap is expected to narrow even more says Fayne Erikcson, president of the National Association for Female Executives.

"There's an ever-increasing percentage of women at higher levels of management—meaning higher compensation," says Eric Greenberg, AMA director of management studies. But the compensation gap widens again at the top of the pay pyramid. Says the AMA, female chief executive officers make a lot less than male CEOs, since women are usually CEOs at smaller companies. *Tammy Reiss*

PRODUCT PEEK

CALL IT JOCK COUTURE

THEY MAY BE A BUNCH OF 220-pound guys who get knocked to the ground for a living, but they're betting they can sell football as a lifestyle, not just a sport. This summer, Foot Locker, an athletic-gear retailer, will start selling shirts, hats, and pants with the QB logo. That's the Quarterback Club, a National Football League players' marketing group launched in 1991 by now-retired quarterback Bernie Kosar. This is QB's first stab at selling its own products.

FAVRE: *Will his garb grab 'em?*

The QB Club, which has 40 active and retired players—not all quarterbacks—offers one-stop shopping to sponsors that want to sign more than one player at a time for promotions. The group, which includes the likes of Brett Favre and Boomer Esiason, earned $10 million-plus last year. Every member will get a cut of profits from the clothes, due in Foot Locker stores in the NFL's 31 markets by August.

QB's line is not Versace. Pants, for example, come only in khaki. But the players say that if Ralph Lauren can create a lifestyle out of polo, they can do it with football. Of course, says Kosar, "Ralph Lauren won't need to lose sleep over us." *Lorraine Woellert*

DRAWN & QUARTERED

"SUBPOENAED OR NON-SUBPOENAED?"

SHOW BIZ

NBC'S NEW COMIC IS NO LENO

JACK WELCH, THE CHAIRMAN of General Electric, may not find the thought of selling the company's sagging NBC subsidiary a laughing matter. But at least one honcho around the Peacock network still has a sense of humor. NBC programming chief Warren Littlefield recently showed a group of television critics that despite the network's falling ratings, he's still a trouper. In a five-minute video, Littlefield played a patient wheeled onto the set of *ER*. He fainted when he heard that the hit sitcom *Seinfeld* was ending its run. Then, after being revived by members of the cast, Littlefield fainted a second time, after he was given the bill.

LITTLEFIELD

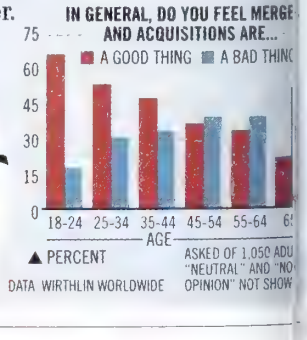
Phenomenal programming costs, like the record $13 million per episode renewal of *ER*, are helping to loosen NBC's tether to GE. Whether part of the company is spun off as a public offering or whether there's a joint venture with other media giants, GE seems eager to get the network off its balance sheet.

After his ready-for-prime-time dramatic television debut, Littlefield turned serious, saying that while General Electric is determined to get a good price for a piece of the network, the company still wants a say in how it operates. *Ronald Grover*

THE BIG PICTURE

FOR GEN X, 'M&A' IS A-OK

Twentysomethings strongly support the mergers-and-acquisitions trend. The young tend to be optimistic, as opposed to those over 65, who grew up in an era when bigness was often not seen as better.



FOOTNOTES Small businesses offering health-care benefits in 1996, 46%; those offering them in 1998, 39%

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Readers Report

WHY PLANE TICKETS COST SO MUCH

I was encouraged to see your commentary ("Sky-high airfares: How to bring them down," Government, July 20). The key to reaching a true market equilibrium price is to have freely moving supply and demand curves. And although the airline industry was deregulated in 1978, the last thing this industry spawns is such a curve. An industry cannot be competitive when the infrastructure (airports and landing rights) is constrained. While these constraints seem physical, they are a manifestation of the prevailing political environment: The oligopolist airlines have no motivation to "loosen" the supply curve, the infrastructure.

The next step, of course, is for government to think about how to correct this market inefficiency. It would certainly be a "win" for the status quo if government spent lots of time and money trying to regulate airline prices. We need a path which allows those tax dollars to be spent on things that could really change the marketplace, such as infrastructure and access.

Danamichele Brennen O'Brien
Rosenbluth International
Philadelphia

Lately, the debate seems to focus on obstacles to "low cost/discount" airlines establishing service in the realm of the giants. It seems, though, that there are other institutionalized obstacles to true competition and the savings that should result. One is that the hub system that dominates carriers' operations appears to be merely a manifestation of oligopoly: The larger carriers have effectively divvied up the major markets. In Pittsburgh, which was rightly used as one of the high-cost examples in your commentary, United, American, TWA, and Delta all have some minor presence. Because of their own hub orientation, however, none of them seems to compete with US Airways on any routes other than to their own hubs.

Jay Barish
Pittsburgh

The commentary identifies the problem but picks the wrong so The airlines are not the proble fact, contrary to the article, ai have dropped by 36%, adjusted flation, since 1978; they have n creased "at double-digit rates.") crease in airport ticket fees is the way to increase capacity and co tion. A better solution is the prop of federal airway trust funds.

Although the federal governme collected $5 billion to $7 billion since 1978 from passenger ticket related taxes, too much of the mo used to mask the deficit instead panding runways, terminals, an ways and improving the air traffic puter system. Such improvements improve capacity, service, and co tion. To suggest that we contin raise fees and taxes is wrong.

George
Whispering Pines,

NEVER TOO YOUNG TO WORRY ABOUT RETIREMENT

"The new math of retirement" nual retirement guide, Cover Story 20) was well done and complete. I very thorough in addressing the t options, and problems facing thos are preparing for retirement. though I am only a student, the was still applicable in my life beca too, must start to worry about r tirement, especially when I fac dilemma of our Social Security s and its inadequacies.

Jodi T
Chatsworth,

DAIMLER HAS LESSONS TO LEARN, TOO

Jeffrey E. Garten makes a good ("Daimler has to steer the Chr merger," Economic Viewpoint, Jul Don't worry, the Daimler manage has every intent to take charge, p bly with a vengeance.

It is not obvious to me, however Daimler culture should dominate

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ECTIONS & CLARIFICATIONS

in record labels get back their ?" (Entertainment, July 27) B. B. label is MCA Records, not Polygram.

to do before disaster strikes" (Per- Business, July 13) stated that the l Emergency Management Agency loans of up to $40,000 for disaster s "through the Small Business stration." In fact, FEMA and the SBA e separate recovery programs.

companies really globally successful at what they do? With an American economy not even twice the size of Japan's and an industrial output that is about the same, why should the U. S.'s market capitalization be over six times as large? With an economy much smaller than Japan's, why should Britain's market be more than 25% larger? Nobody at BUSINESS WEEK is eager to talk about an Anglo-American equity "bubble," but your Global 1000 strikes me as more than a bit distorted by the runup in the U. S. dollar, the British pound, and stocks in both New York and London.

Charles E. Jannuzi
Fukui University
Japan

HIGH INTEREST RATES HOBBLE BRAZIL'S WORKERS

Ian Katz fails to consider the harm that could result from his proposal for Brazil to keep currency reserves and interest rates high ("Walking an inter-

s. Certainly its technological lead- should provide a firm foundation n companies (although it remains een how that technology can be ed for Chrysler's customers). On ner hand, Daimler has much to rom Chrysler, for example, in n management and manufactur- nagement, not to speak of finan- ntrols.

Richard P. Hervey
Sigma Associates
Southfield, Mich.

US PARING PAN AIRLINES

as disappointing that, in describ- pan Airlines Co.'s situation, you o mention that, in four years of cturing, Japan Airlines has cut jobs and is cutting 1,500 more airlines that fell to earth," Indus- July 13). The airline has also d cockpit crew salaries by 10% immed other personnel costs—so ur operating cost per available lometer is now 46.5¢, only 2.1¢ than United Airlines Inc.—and down.

t is nowhere near the "50% high- n that of U. S. rivals" mentioned r story. To cite only the very mi- st-cutting of cockpit crew trans- carried out four years ago, the gnores the progress achieved and ndreds of millions of dollars JAL t in reaching our goal of improved fficiency.

Geoffrey Tudor
Director, International
Corporate Communications
Japan Airlines
Tokyo

A STRONG DOLLAR TO AN EQUITY BUBBLE?

t what is the nature of the rela- ip between a nation's economic titiveness and its equity markets? year of the deal," The Global July 13). Are all those American

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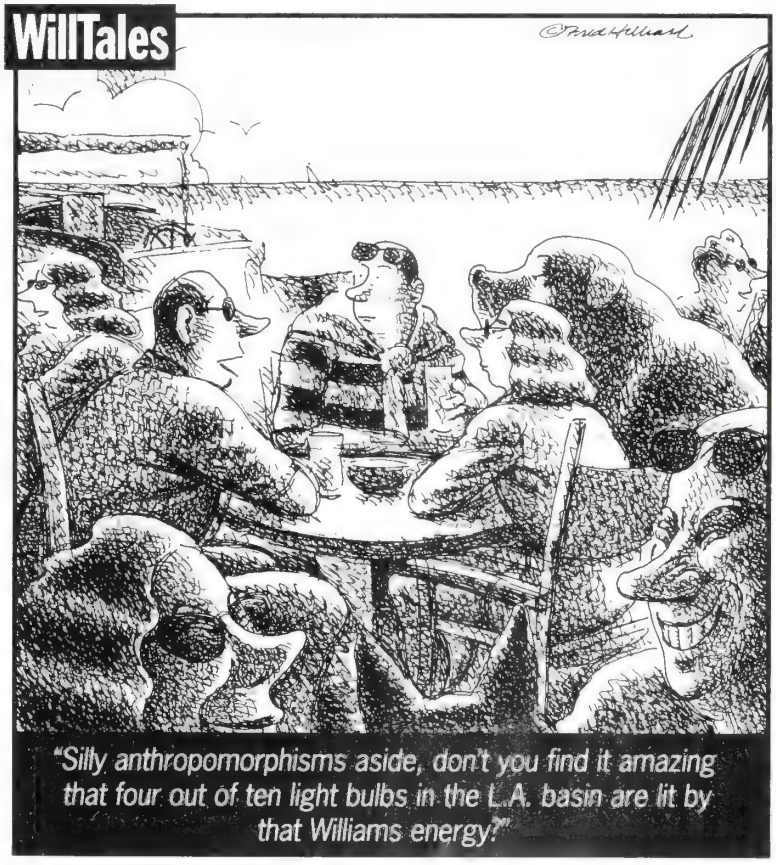

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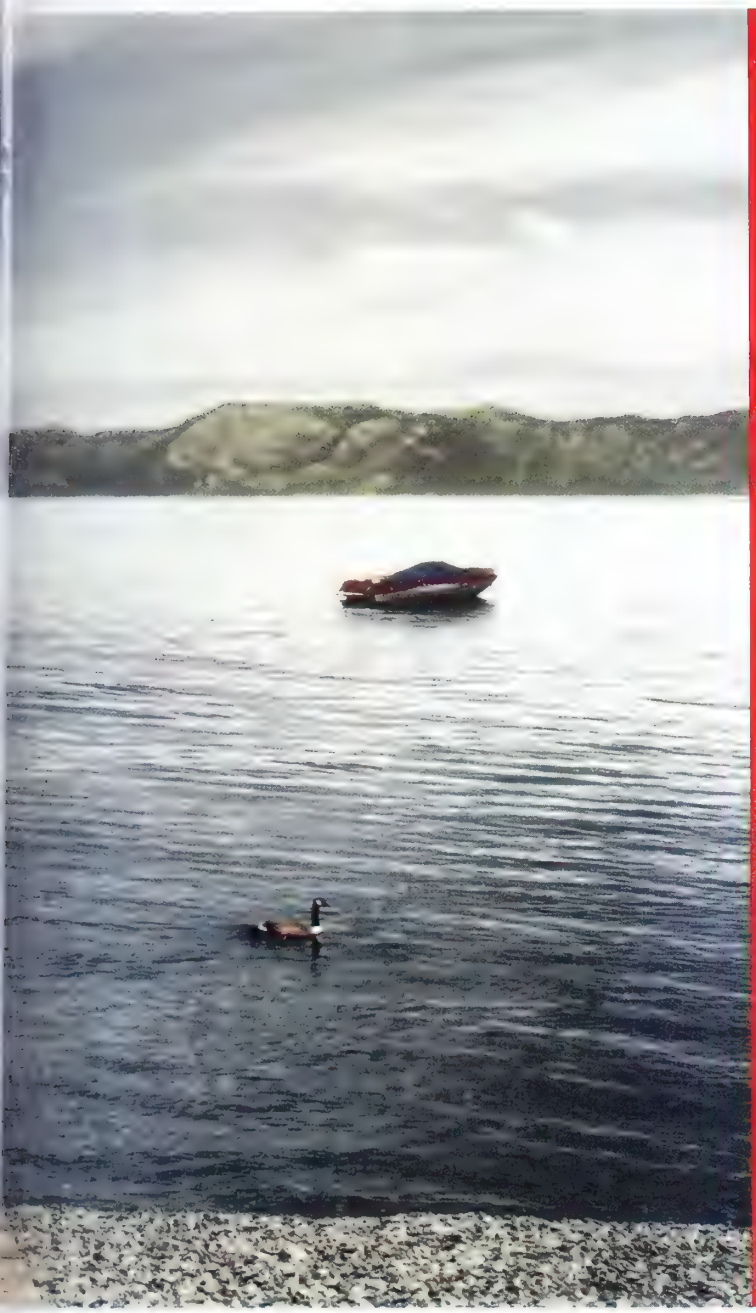

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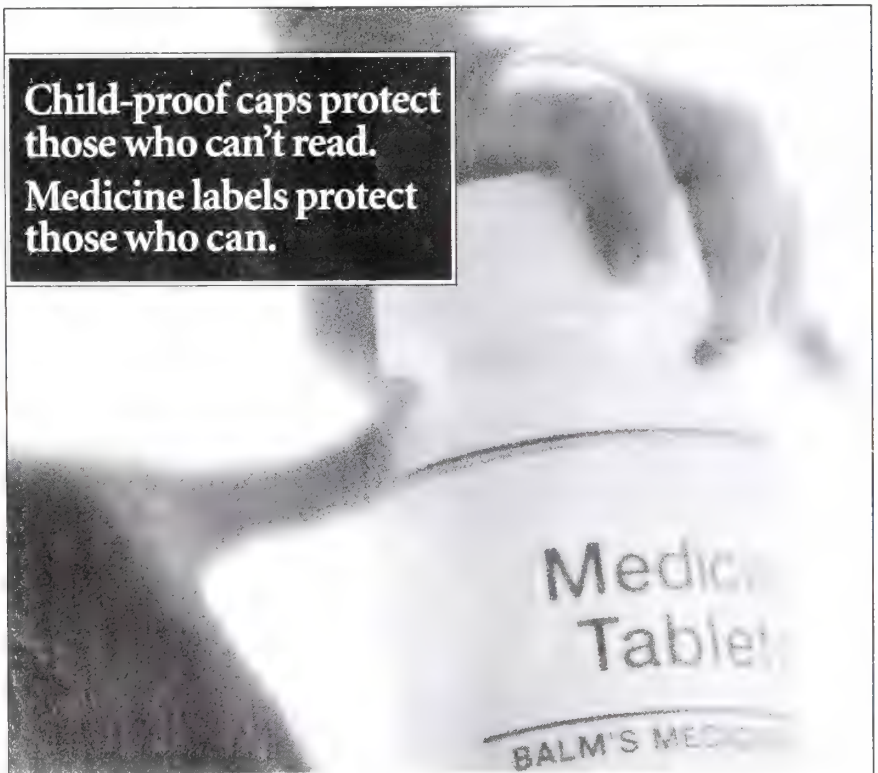

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A message from the
Council on Family Health
A public service by the manufacturers of medicine

Readers Repor

est-rate high wire," Business Ou July 20). While his proposal may it possible for President Fernando rique Cardoso to fabricate a virtu visional safety net to help keep th fidence of foreign investors and having another threat of Latin A can default, it offers little to the ing class. A boost in interest stymies capital investment that otherwise indirectly benefit worke expanding their job opportunitie investors divert funds to higher-yi bank assets, the resulting inade investment pool forces officials to inflationary policies. But Cardoso do well to not ignore the less ob problems of long-term inflation a employment that have plagued Latin American nations.

Christopher L. C
Council on Hemispheric A
Washi

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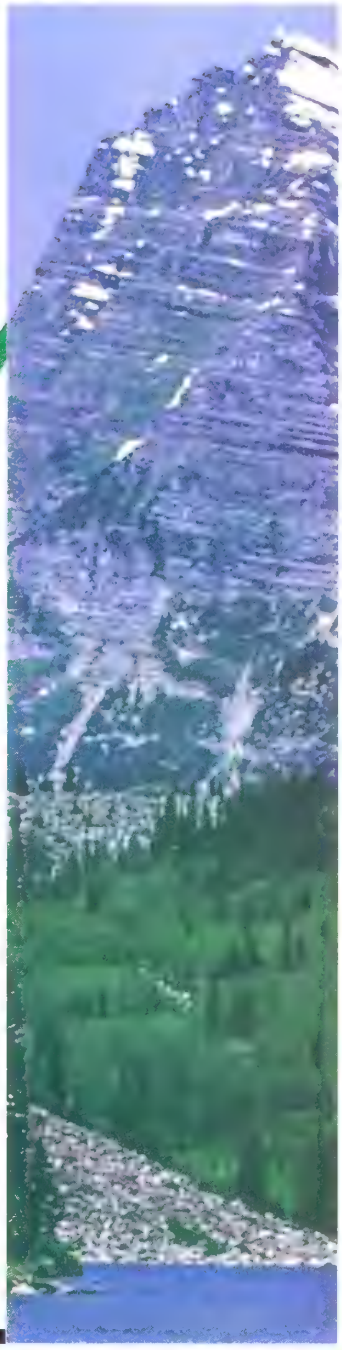

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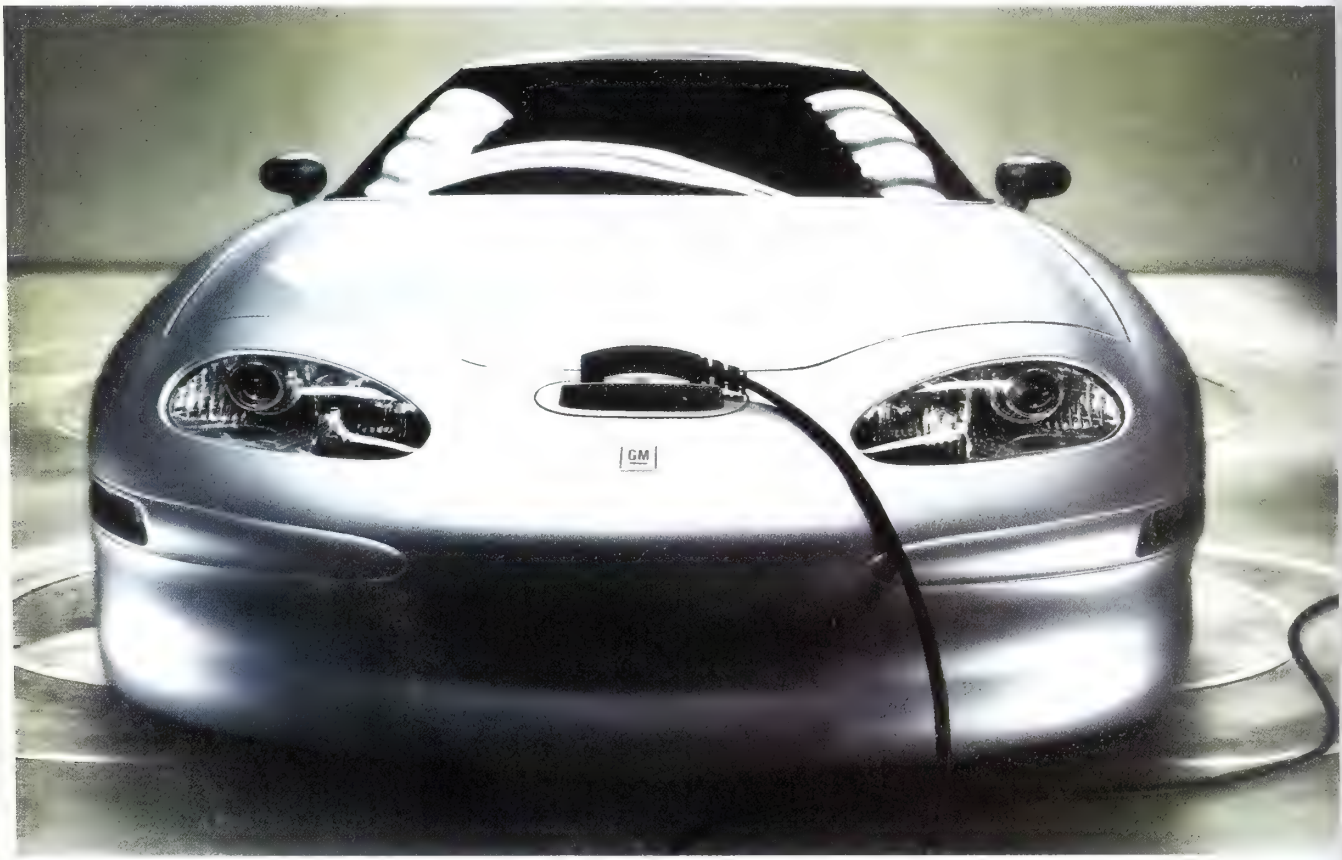

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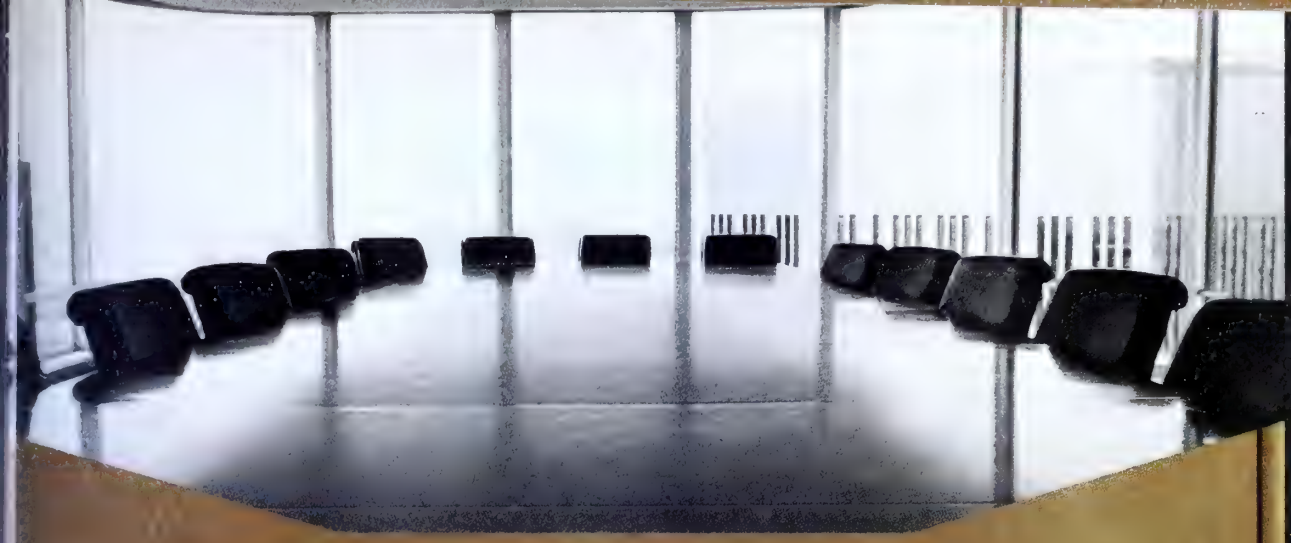

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TEPHEN H. WILDSTROM

UMB APPLIANCES MARTEN UP A BIT

ease-of-use ıdards remain fully low for 's and the like

Why are electronic appliances so stupid? Why, in an era ıeap, powerful comput- loes every piece of con- r electronics in my e idiotically flash 12 k after a momentary r interruption? Why scheduling a VCR to d remind me of pro- ming 1950s-era IBM ac- ing machines?

ose appliances are by first-rate technolo- mpanies, which seem trying to do better. Electronics, for ex- e, has put some pow- technology to work new smart VCR. rtunately, the re- fall well short of ıqualified success. reasons for that e show how far the try has to go to match the dubious ease-of-use lard of the PC business.

K AND TAPE. The Sony 20HF VCR ($450) includes innovations that make ısier to use. First is a overdue feature that is ming common on high- recorders: the ability to the time automatically a power outage. ıe other innovations nore exotic. One program guide in theory, al- you to select ming program ıame from an creen listing with a single click of a remote, schedule a taping. The system relies on program information from Gemstar Development that is transmitted over an otherwise unused part of some stations' signals.

The difficulty is that only a small fraction of shows turn up in the Guide Plus directory. For the others, that means going to the newspaper to look up the VCR Plus code in a program listing, which simplifies programming somewhat. But that doesn't always cover all the channels, so for the rest, you're stuck with old-fashioned time-and-channel programming. Another problem is that the Guide Plus listings only run through midnight of the next day. (A version of the VCR without Guide Plus is available for $400.)

The second advanced feature, SmartFile, works better. You put a special label containing a microchip ($9.95 for five) on a cassette. When you record, the VCR writes time, date, duration, and, if available, program information on the chip. When you hold the tape up to a sensor on the front of the VCR, a content index appears on the screen. No more mystery tapes.

As more smart VCRs appear, the Guide Plus service will get better and SmartFile labels will get cheaper. But consumer-electronics makers have their work cut out for them in the usability department. I'm used to feature bloat and confusing user interfaces in computer software, but the Sony VCR suffers from as bad a case as I have seen. The remote control features 33 buttons, two switches, a joystick-like "cursor stick," and a multifunction "shuttle ring." In addition, many of the buttons change their purpose, say to exotic editing functions, when a door on the VCR is opened. The result is a control that apparently can do just about anything but makes it absurdly difficult to figure out how to accomplish simple tasks. I expect to use most software without reading a manual, and I certainly don't want to struggle with an 87-page manual just to record *South Park*.

Another issue the consumer-electronics folks have to grapple with is the mind-boggling difficulty of connecting a TV, VCR, cable box, and maybe a DVD player or a game console so that all of them work properly. Strange but true, it is easier to set up a small computer network than a home entertainment center.

The new Sony VCR is a welcome step in the right direction. But it also shows that as computer makers strive to make their products more appliance-like, the consumer-electronics industry has some problems of its own to fix.

SONY'S NEW VCR: *No more flashing 12 o'clock signals*

BULLETIN BOARD

ON THE ROAD

GO WIRELESS...

The search for a good way to give handheld computers wireless communications goes on. One of the latest entrants is the Snap-On Modem from Belgium-based Option International (www.option.com). The $159 Snap-On attaches to the bottom of a PalmPilot or Palm III and connects with a short cable to any GSM digital cell phone. (Although GSM service is relatively limited in the U. S., it is the standard digital cellular system in most of the world, especially Europe.) The modem allows you to send and receive E-mail, faxes, and pages on a Pilot. The Pilot's address book can initiate voice calls. The system works well, though the two-piece arrangement with the Pilot and the handset is a bit clumsy.

...OR GET HELP

If you use more conventional gear, Norton Mobile Essentials from Symantec (408 253-9600) can help communicate by modem from a laptop. The $70 program helps with Microsoft's Dial-up Networking. If you need to change the standard configuration for the networking software, the process is extremely murky. Norton Mobile Essentials simplifies the process, even letting you manage multiple dial-up configurations. The program also offers useful diagnostic routines and a database of phone numbers, including local-access numbers for America Online and CompuServe.

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RANSOM
The Untold Story of International Kidnapping
By Ann Hagedorn Auerbach
Henry Holt • 481pp • $25

WE HAVE YOUR CEO. HAND OVER $50 MILLION

Driving in Mexico City has never been easy, what with wild lane changing, rampant running of red lights, and bribe-seeking cops. Now there's a new hazard: carloads of armed bodyguards that zigzag through traffic behind rich executives' bulletproof vehicles. Kidnappings are way up in Mexico, with 1,500 reported in 1997. In recent years, several moguls have been abducted and released only after their families paid ransoms reported to be as high as $50 million. Sales of armored cars, including some James Bond-type models that fire tear gas and drop tire-popping tacks, are booming.

It's not just Mexico—kidnappings are up worldwide, with as many as 20,000 to 30,000 people being taken hostage each year in the 1990s. And today, a new group is exposed to risk: global travelers, from adventure-seeking tourists to execs scouting new markets. The end of the cold war opened up lands that had been shut to investment and tourism. But many countries lack law enforcement and suffer political unrest that receives little publicity outside their borders. Layoffs of cops in Mexico and the shrinking of armies and secret police in Eastern Europe also contribute to the violence. In Colombia, the crackdown on cocaine trafficking nudged thugs into hostage-taking, a $120 million-a-year industry by the mid-1990s.

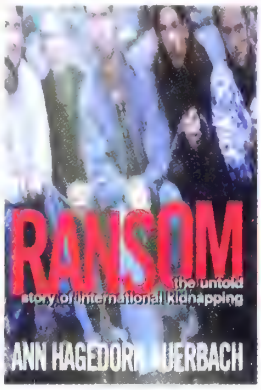
A riveting account of the dramatic growth in global abductions can be found in *Ransom: The Untold Story of International Kidnapping* by fo *Wall Street Journal* reporter Ann dorn Auerbach. Focusing on ki pings that took place between 199 1997, the well-researched book is with colorful anecdotes from fo hostages, family members, and g trotting kidnap negotiators. In chapters, a mind-numbing barra statistics on kidnapping prompte to skip ahead a bit to the next ho story. But editing lapses aside, *Ra* is well worth reading.

Auerbach's starting point is 1995, when six Westerners trekki the Himalayas were captured by fighting for Pakistani control of Ka and for the release of jailed comr Auerbach describes the agonizing erlessness of family members an eign governments in dealing with I authorities, who refused to make concessions to the rebels. One ho escaped, but Auerbach describes the kidnappers murdered and de tated a Norwegian captive.

Amid the author's discussion of kidnappings from Colombia to P New Guinea, she periodically r back to this Kashmir case, remi the reader that three years

ed and that the remaining hostages ill somewhere—dead or alive—in imalayas. Auerbach persuaded vic- relatives to open their hearts—neir diaries—to her. Thus the read- arns of the wrenching despair of Schelly, a Spokane (Wash.) school- er whose husband, physician Don- Hutchings, was among seized.

hough many kidnap- are politically moti- , Auerbach says that wing number are sim- und-raising exercises uerrillas or common nals. When a new group, the Popular lutionary Army, sur- in Mexico in 1996, ex- surmised that the financed itself gh kidnappings carried ver the previous two years, she Rich locals are often the first vic- In the Third World, billions in for- investment, while marginally bet- the lot of the poor, have kindled tment against elites who snagged of the wealth. And there's in- ing risk for tourists and expatriate atives, particularly for Americans, are perceived as rich even when are not. Their sheer numbers—3.2 million living overseas and 50 million traveling there each year—have left Americans more imperiled than citizens of other countries.



What happens when someone is kidnapped abroad? That depends on the victim's clout. If an executive's company has kidnap insurance, then a private negotiator often comes to help win his release. *Ransom* is larded with fascinating tales told by these cloak-and-dagger intermediaries. Former CIA agent Mike Ackerman relates his efforts to rescue a victim in early-1990s, war-torn El Salvador: "I was thinking how I couldn't wait to get out of there, and then suddenly I saw a bus-load of elderly tourists pull up and I thought, What the hell are they doing here in the middle of a civil war?"

Not everyone, however, can afford kidnap-negotiation services. Many families must deal with the kidnappers on their own or rely on embassy personnel, who may call in the FBI's special unit on overseas kidnapping. Auerbach describes the case of Thomas Hargrove, a Texas science writer working in Colombia, who was held for 334 days—until his wife, frustrated by his company's refusal to pay a ransom, hired her own negotiators. For $500,000, they got him out.

If Auerbach can be faulted, it is for giving the impression that international kidnapping is rampant—some readers may even be inclined to swear off overseas travel. Most travelers, of course, will have uneventful trips.

Still, *Ransom* should be required reading at any company with employees based abroad—especially for the legions of small and midsize companies sending executives overseas for the first time. They should know that Washington often tones down travel advisories, lest they ruin the tourism prospects of the host country or scuttle complex diplomatic relations. They must make sure adequate protection is in place, whether it's kidnap insurance, security-trained drivers, or armed guards at an employee's residence. Otherwise, Auerbach suggests, they may face retribution: Hargrove, for example, sued a kidnap-negotiation firm, an insurance company, and his employer for $100 million, contending they failed to win his speedy release. (The suit was settled last year for an undisclosed sum.) Auerbach argues that as globalization makes the world seem smaller, ever more hostage-taking is likely. Better be prepared.

BY GERI SMITH

Smith is BUSINESS WEEK's Mexico City bureau chief.

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BY LAURA D'ANDREA TYSON

TAX CUTS? LET'S NOT GIVE AWAY THE STORE

PRIORITIES: If the rosy budget forecasts do pan out, use the money to fix Social Security and Medicare—before the next recession

Congressional Republicans twice closed down the government in 1995, citing their grave concerns about "deficits as far as the eye could see" and the huge mountain of federal debt that would burden future generations. Just three years later, many of the same Republicans are fixated on surpluses as far as the eye can see. They seem to have forgotten the pesky future debt burden. Instead, they want to use the lion's share of projected surpluses, currently estimated at about $1.6 trillion over the next decade, to finance huge tax cuts.

This approach fails on several scores. First, those of us who have worked in the budget trenches in recent years know that projections are inherently uncertain. A change as small as two-tenths of a percentage point in the annual projected growth rate of gross domestic product over 10 years can mean the difference between red and black ink on the budget's bottom line. Prudence dictates that we should err on the side of caution: Before promising generous tax relief from surpluses that may never materialize, Congress should, at the least, apply some of the surplus to a substantial rainy-day fund to help the economy weather the next recession.

But what about Social Security and Medicare, the so-called runaway entitlement programs that the Republican Congress says it wants to reform and save? Over the next several years, the federal budget is in surplus in part because projected inflows into the Social Security system exceed projected outflows. Unfortunately, without reforms, this happy state of affairs will end sometime during the second decade of the next century, when the number of retirees begins to grow faster than the number of workers paying payroll taxes.

NO EXTREME MEASURES. I am not convinced that the Social Security system is in crisis or that untested privatization schemes are needed to save it. In fact, the size of changes required to eliminate Social Security's projected deficit over the next 75 years is no greater than those made in the past. Diversification of some of the trust fund's assets into equities, along with a combination of small adjustments in the retirement age, in methods for calculating benefits, and in the payroll tax rate and its base would solve the "crisis." All the same, the nation deserves a serious debate about the future of Social Security, which has justifiably been called crown jewel of federal programs. As P dent Clinton has urged, we should de how to save Social Security before we s projected budget surpluses on tax cu doubtful economic benefit.

The case that a crisis is loomin Medicare is much more compelling. The rent benefits package is woefully out of It does not cover the cost of medicines. does it cover many of the chronic care n of the elderly—needs that are bound to in importance as the elderly live longer.

Overall, Medicare accounts for less half of the total spending on health car the elderly. But even if Medicare spen per participant grows at about the same as private health-care spending per pe over the next 30 years, as it has over the vious 30 years, Medicare will consume a 28% of total government revenues by vs. just over 10% today.

SIMPLIFY. Congress set up a commissio recommend ways to ensure Medicare's ture. Action on its recommendations sh precede any tax-cutting spree. Otherwise could find ourselves confronted with a ch between harsh cutbacks in Medicare and other round of future deficits as far as the can see.

Before we give away the store in tax we should recognize that overall taxes share of GDP are lower in the U.S. tha other industrial countries. Today, most A ican taxpayers face much lower tax rate their top slice of income than they did decades ago. That's not to say that our system wouldn't benefit from reform.

The system is too complicated. It has come more so as tax incentives have repl government spending in efforts to ach worthy goals such as better educationa portunities. Payroll taxes fall notably on working families and dampen the pa job creation over the long run.

Meaningful tax reform will certainly two effects: It will create some real lo as well as some real winners, and it wil government revenues. So, if we are goin devote some portion of future budget pluses to tax relief, let's do so in a way fosters beneficial reform. We should a simply making a hodgepodge of cuts tha flect the whims of focus groups in a con sional election year.

Laura D'Andrea Tyson is dean of the Haas School of Business at the University of California at Berkeley and was President Clinton's chief economic adviser.

Al Sussman
V.P. Information Technology
Rollerblade Inc.

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BY MIKE McNAMEE

A HIKE IS WAY DOWN THE PIKE

Or so a study of Fed moves implies

When it comes to raising interest rates, the Greenspan Fed is more talk than action.

Economist Anthony Chan of BancOne Investment Advisors Corp. compared the Federal Open Market Committee's directives—statements of whether the panel thinks money should be tighter or looser—with the Federal Reserve's actual policy moves. In 10 years under Chairman Alan Greenspan, the Fed issued 28 directives biased toward tighter monetary policy—but hiked rates during only nine of those periods. By contrast, the central bank was much more likely to act on a bias toward ease: The Fed cut rates 19 out of the 21 times that its directives indicated a need for easier money.

GREENSPAN: *Often just bark?*

In its last two published directives, for March and May, the Fed leaned toward higher rates. But based on the Greenspan record, Chan concludes that those leanings probably won't lead to actual rate hikes for months to come.

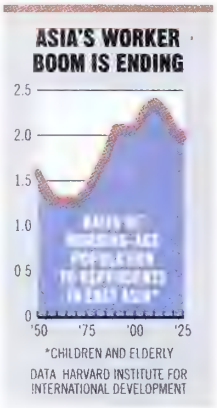
WHAT SPARKED ASIA'S MIRACLE

Postwar boomers played a big part

What fueled Asia's economic miracle of the 1970s and '80s? One overlooked force, argue two Harvard University economists, was demography. A surge in the working-age population starting in the 1970s sparked a quarter-century of rapid growth—but may have sown the seeds for stagnation ahead.

After World War II, Asia underwent an extremely rapid "demographic transition"—a rapid drop in infant mortality followed, with a lag, by a declining fertility rate. At first, the development slowed East Asia's growth as rising numbers of children meant relatively fewer workers to support the dependent population, write David E. Bloom and Jeffrey G. Williamson in a National Bureau of Economic Research paper.

But in the 1970s, as those children reached working age, the share of workers and savers in the population soared, and so did growth. The authors calculate that this shift alone accounted for 1.4 to 1.9 percentage points of annual growth in per capita output from 1965 to 1990, or almost a third of the region's 6.1% annual per capita growth.



Trouble is, in parts of East Asia the demographic gift is just about exhausted. The burden of an aging population will reduce long-term per capita growth by 1 percentage point in Japan and 2 points or more in Hong Kong over the coming quarter-century, the authors say.

An echo of the postwar baby boom in the coming decade will give the worker-to-dependent ratio a small lift in some countries, so that for East Asia as a whole, the ratio of working-age people to dependents won't peak until 2010 (chart). Southeast Asia, India, Pakistan, and Bangladesh still are enjoying rapid growth in the working-age cohorts.

A PENNY EARNED IS A PENNY SAVED

Why the rich squirrel money away

It is possible to have more money than you need. As billionaire H. L. Hunt said in the '70s: "For practical purposes, someone who has $200,000 a year is as well off as I am." So why do the rich continue to pile up wealth?

High-income households save more than either of two standard economic models would predict, says Johns Hopkins University economist Christopher D. Carroll. Contrary to the "life-cycle" model, the rich save far more than they need to support themselves in old age.

And the "dynastic" model, which suggests that the rich want to leave large bequests to their children, doesn't work either. Carroll cites a study of Internal Revenue Service data showing that the childless wealthy don't spend down assets more rapidly than those who leave bequests to their children.

Carroll suggests a new explanation: "capitalist spirit" model, in which rich value wealth for its own sake. unspent wealth can bring economic vices—including political power. Howard Hughes once put it, "mon the measuring rod of power."

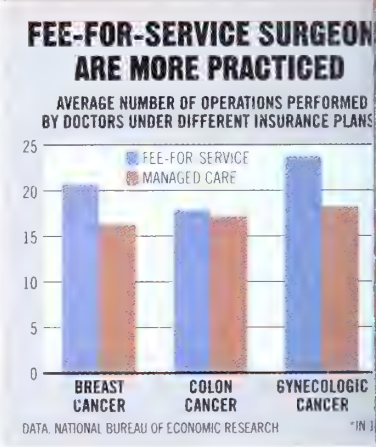
ARE HMO USERS SHORTCHANGED

Maybe, if they need surgery

Medical studies show that for p cians and hospitals alike, pra pays: Surgeons who perform a parti procedure more often tend to de better results. By that measure tients in managed care may be s changed, say researchers Sarah man of Brigham & Women's Hos in Boston and David Scharfstei Massachusetts Institute of Technol

In a National Bureau of Econ Research study, Feldman and Sc stein looked at cancer operation Massachusetts in 1995. They stu breast, colorectal, and gynecological cers because in almost every case treatment requires surgery. Since procedures are nonelective, the aut say their results aren't biased by geons' incentives to push operation

Their finding: Nonelderly pati with traditional fee-for-service insur tended to go to more practiced surg and hospitals. These surgeons and pitals did a higher volume of specia cancer operations (chart) than did ones operating on members of the s six biggest managed-care plans. The searchers speculate that managed- plans tend to contract with less spe ized hospitals, where the plans can bigger discounts, leading in turn to of lower-volume surgeons.



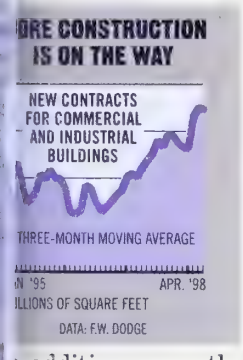
AMES C. COOPER & KATHLEEN MADIGAN

APITAL SPENDING HE CAUTION FLAGS ARE OUT

a woes, weaker profits, and a shaky stock market could curb outlays

U.S. ECONOMY Is the 1990s boom in capital spending over? The signs are ing to point that way: The second-quarter slow- n in economic growth, tepid gains in profits, excess ry capacity, and an increasingly shaky stock mar- are setting up a tough climate for businesses as try to find room for new projects in their 1999 al budgets. The implications could be enormous. n the unprecedented vigor in capital spending dur- his seven-year business expansion, any slowdown be felt throughout the economy.

owever, while business investment in new plants equipment is sure to face rougher going in the ng year, the outlook is far from gloomy. High-tech stment should hold up fairly well, as businesses con- e to press for gains in productivity and competi- ness. Also, some additional outlays will go toward ing the Year 2000 computer problem. Any soft- in equipment spending is likely to be concentrated raditional items, such as machinery and heavy pment, as it was during the 1995 slowdown.



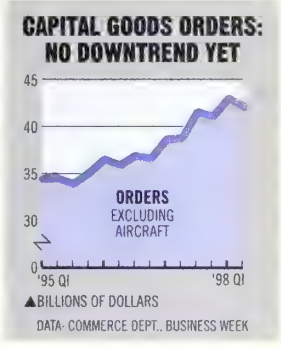
Other pluses: The real cost of capital has dropped sharply in recent years, given low interest rates and cheaper equity financing. That lowers the rate of return needed to justify a project. With the price of capital goods falling as wage costs rise, capital is increasingly the less costly input, which encourages businesses to substitute capital for labor.

n addition, even though manufacturing capacity is ing excessive relative to output, as the Asian crisis ns export demand, capacity use in the rest of the nomy remains very tight, as illustrated by the ex- tionally low unemployment rate. That is especially in the huge service sector, where two-thirds of all stment outlays are made. Moreover, construction ears set to pick up, given low vacancy rates, rising ts, and an increase in building contracts (chart).

LATEST INDICATORS remain fairly upbeat. New ers for nondefense capital goods rose 0.6% in June, r declining 1% in May. However, the ups and downs ircraft orders along with the strike at General Mo- Corp. understate the recent performance. Excluding the transportation sector, bookings jumped 3.4% in June and 0.8% in May. Overall capital equipment orders in the second quarter fell from the first-quarter, but first-quarter orders had surged, and there is no clear sign of any new trend of weakness (chart).

Keep in mind that the orders data do not distinguish between foreign and domestic demand, so any weakness in capital-goods orders may only reflect the Asian crisis, not U. S. companies cutting back on their equipment outlays. In fact, weaker Asian demand has hit U. S. makers of capital goods especially hard. Through the first quarter, exports of capital equipment excluding autos rose at an annual rate of 8% in the three quarters since the crisis began, down sharply from a 38% rate during the previous three quarters.

Continued strength in domestic demand is a key support under the outlook for capital spending. Despite the economy's second-quarter slowdown, domestic demand remained exceptionally strong, and consumers are still very upbeat. The Conference Board's index of consumer confidence dipped to 135.4 in July, but the June level of 138.2 was a three-decade high. And while sales of existing homes slipped 2.4% in June, buying is 15% ahead of a year ago, with mortgage applications still at a high level. And despite weak foreign demand, orders for durable goods are holding up. While overall bookings dipped 0.2% in June, orders excluding transportation rose 1.9%, the biggest gain in nearly a year.



One measure of U. S. demand for capital goods is imports, and they are booming. Through the first quarter, imported capital equipment excluding autos was up 27% from a year ago. That robust annual pace has remained little changed since late 1996.

TO BE SURE, CAPITAL SPENDING is becoming increasingly vulnerable, especially as profits slow. Until the second half of last year, soaring profits had provided a reservoir of internal funds for financing capital projects. But now, earnings growth has slowed to a standstill, and companies will have to find other sources of funds, either in the credit or equity markets.

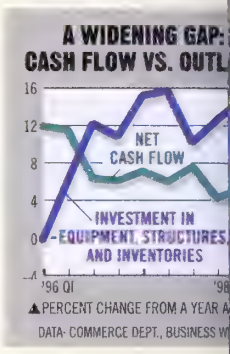
The growing pressure on financing shows up in the

gap between the growth rates of cash flow and outlays. First-quarter capital spending on equipment and structures grew 10.7% from a year ago, far exceeding the 5.2% increase in net cash flow (chart). That's the widest gap since the 1995 falloff in profit growth—which ushered in a slowdown in capital spending.

Related to earnings, slumping stock prices are another concern. Equity financing has been a cheap source of funds for many companies in recent years, but the Dow Jones industrials average is already down some 400 points since July 17 on growing fears that prices are higher than earnings prospects can justify. If the slump in stock prices continues, the cost of equity financing will increase further, as the earnings yield on stocks rises to reflect the lower stock price.

CLEARLY, THE SECTOR MOST LIKELY to start tightening up its purse strings is manufacturing. Factories have been adding production capacity at an annual rate of 5% or more for the past three years, the fastest clip in three decades. However, because of the drag from Asia, an increasing amount of that capacity is starting to sit idle. Factory output grew at an annual rate of only 1.7% in the second quarter, down from 2.3% in the first quarter, and a sharp slowing from 8.1% in the first quarter of last year. As a result, operating rates are now generally falling.

However, manufacturing represents less than a third of all investment outlays. The rest goes to the vice-producing industries such as communications, r trade, and finance, where operating rates remain ceptionally high. Services continue to boom, lar unfettered by international constraints.



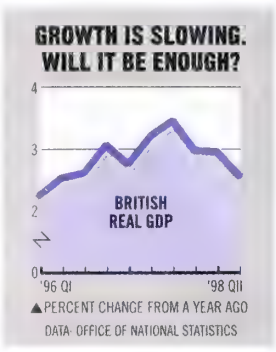
A pickup in business construction also may provide at least a small offset to any slowdown in equipment spending. Outlays for industrial plants, offices, and warehouses have gone nowhere for the past year and a half, after a steady rise during the two previous years. But that pause may soon be over. Commercial vacancy rates are at a 12-year low, and new contracts for commercial and dustrial construction are on the rise. Actual out for office construction are already particularly str

For now, at least, the outlook for capital spending mains positive but cautious. A lot is riding on critical sector. Not only will it affect overall growth, the investment boom has also enhanced U. S. com tiveness, and it has served to lift productivity and down inflation. If the boom goes bust, the econ will lose many of the pluses that have helped to d this business cycle.

BRITAIN

NEW WORRIES FOR AN OLD ECONOMY

In a world of New Economy ideas that say that fast growth and low inflation can coexist, Britain is very much an Old Economy. Late in the business cycle, excess demand is lifting wages and prices. The monetary authorities are clamping down, insuring a sharp slowdown.



The latest report on second-quarter gross domestic product shows slower growth, but is the pace cool enough to avert more interest-rate hikes? Because of continued vigor in services, where wage and price pressures are intense, most economists don't think so.

Real gross domestic product rose 0.5% last quarter, and it was up 2.6% from a year ago. That's the slowest pace in two years, but it reflects Britain's two-speed growth. Manufacturing is in a recession that will get worse. Exports and interest-sensitive goods are ailing from the two-year, 27% rise in the pound and from six quarter-point rate hikes in 15 months. Base lending rates are 7.5%, a 5½-year high.

Meanwhile, annual service-sector GDP—two-thirds of the economy and less influenced by the pound and rates—rose 3.6% last quarter. That pace, slower than in recent quarters, is still strong enough to keep the Bank of England's Monetary Policy Committee fretting about underlying inflation, which is already just above its 2.5% target. The MPC worried about tight labor markets, citing wage growth in its June 4 rate hike. Since then, pri vate-sector pay growth has spe up to a 6% annual rate.

Demand remains buoyant. Re tail sales have slowed, but pay gains are lifting buying power, and higher home values and sto prices are boosting household ba ance sheets. Moreover, the gov ernment now expects that real public spending will grow a mor than-expected 2¾% annually ove the next three years.

To break the Old Economy cy cle, Britain needs increased pro ductivity: Its rate is 40% lower than in the U. S. and 20% below Germany and France. For now, expect slower growth, rising inf tion, and wider deficits in the cu rent account and public finances

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No matter what curves lie ahead,
at least we've made personal insurance easy.
ROYAL &
SUNALLIANCE
Providing commercial property and casualty,
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DETROIT

WHAT PRICE PEACE?

GM lost a lot to the UAW, and labor relations are still bad

Can General Motors Corp. justify the $2.2 billion it lost trying to win its costliest labor battle in decades? It wouldn't seem so—and not just because it won so little at the bargaining table. What makes GM's victory seem so puny is that, after enduring a companywide shutdown and the potential loss of even more of its dwindling market share, the car giant has left so many wrenching questions about its future—including its relations with its workers—unresolved. How, for instance, will the company pursue its goal to shed 50,000 hourly workers in the coming years? What other measures should it take to improve efficiency in manufacturing and marketing? How will it halt its market-share slide?

True, when the 54-day strike ended on July 28, the company had won some of the work-rule changes aimed at improving productivity that had prompted the United Auto Workers' walkout. GM also won a measure of labor peace, which could last until its national pact with the union expires in September, 1999.

ANTAGONISM. These, however, are small victories involving only a handful of plants. And to clinch a deal, GM gave plenty of ground—including promising to keep open plants that it had said were not needed six weeks ago. That includes the Flint (Mich.) stamping and parts facility where the strike began—and where GM will now invest $180 million, as originally promised.

Even so, these concessions won't do much to reverse years of antagonism between GM and the union. "Obviously, the relationship that our members and our union has with GM leaves a great deal to be desired," Richard Shoemaker, head of the UAW's GM unit, said on July 29. The sides did agree to confer more frequently to head off disputes. "I'm hopeful this new process will help move towards better relations and avoid conflict," says Shoemaker.

On the other hand, UAW President Stephen P. Yokich has been meeting regularly with top GM officials for the years, with little to show for

HQ: CAN GM MOVE AHEAD WITH RESTRUCTURING?

HOW THE SIDES CAME TOGETHER

WHAT THE COMPANY GOT

- The UAW agrees to new work rules to lift productivity at the Flint stamping plant.
- The pact settles disputes at five plants where strikes were threatened; UAW promises labor peace at two Delphi plants until 2000.

WHAT THE UNION GO

- GM has agreed to inv $180 million at the Fli stamping plant, fulfillin original pledge.
- GM agrees not to sel the Delphi plants in Fli or Dayton until January 2000.

eed, the Flint showdown—in which company tried to have the strike ared illegal—is a recent low in GM r relations and could set the stage an even bigger confrontation in 9. In Lordstown, Ohio, for exam- many GM workers are convinced the company will move their jobs Mexico if they don't make big con- ions. "They're threatening us, and re tired of threats," says Lord- wn worker Joseph Popovich. Whether it's moving small-car pro- tion from Lordstown or spinning parts subsidiaries, GM now is under re pressure than ever to get its ts down. Ford Motor Co. and ysler Corp. have shown that such s, though painful, can be less dis- tive and ultimately less costly if union is a partner instead of an ersary. "GM ought to have learned n this strike that it can't win labor wdowns," says Furman Selz LLC lyst Maryann N. Keller. "They've 24 strikes since 1990, and it hasn't red anything."

APPOINTMENT. Certainly, this lat- shutdown—costing $2.2 billion in sales and perhaps more lost mar- share—seems out of proportion h the local compromises that set- l it. After the strike in Flint halted l GM production in North America, the company got the UAW to bend on work rules in the stamping plant. The union agreed to increase the quota for workers in one section by 15% so they would work longer hours. Even now, some will be able to fill the new quota in six hours or less.

Probably the biggest short-term gain for GM was the promise by the UAW not to strike at Flint or at its Dayton (Ohio) brake plant until January, 2000. But it won it at the cost of pledging not to sell Dayton until then. The promise could throw a wrench in management's plan to spin off its entire Delphi parts division. If that happens, investors would be very unhappy. "We would be shocked if a Delphi spin-off didn't happen this year," says Kevin L. Risen, co-manager of several funds at Neuberger & Berman Group, which owns more than 10 million GM shares.

Investors hoping to see GM drastically ratchet up efforts to improve efficiency now will likely be disappointed. The board, which is scheduled to gather for its regular meeting on Aug. 3, does not contemplate any major new initiatives to close plants, cut poor-selling models or outsource work, according to people close to management. Indeed, management may tread more lightly to avoid a fresh confrontation with the UAW. This leaves the company with few options—beyond waiting for older workers to retire—to resize its workforce and plant capacity to match its market share. GM has about 31% of the U.S. vehicle market, but still has enough capacity to fill 36%—a slice it may never see again.

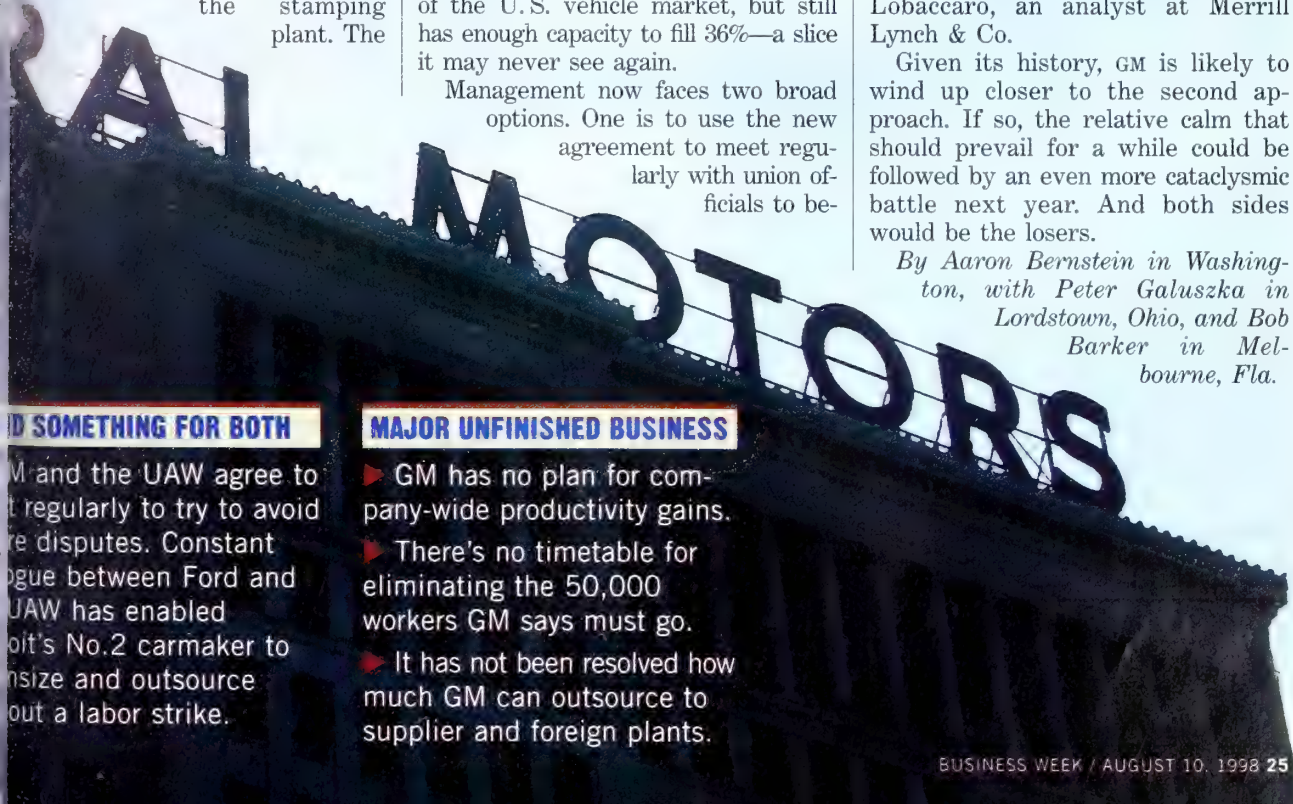
Management now faces two broad options. One is to use the new agreement to meet regularly with union officials to begin to forge better relations. The day the strike ended, Yokich said that he hopes the meetings will help "the UAW and GM to sit down and find a better way of doing things." GM's vice-president for labor relations, Gerald A. Knechtel, expressed a similar desire.

"GM needs to convince its employees that they have a stake in becoming more competitive," says Sean McAlinden, a University of Michigan auto expert. "Even if GM had to pay them more, it would be cheaper than what it spends on strikes."

"BETTER CHANCE." GM's other choice: to confront the UAW head on over restructuring. In one way, the strike could make that strategy somewhat easier. Yokich settled before a judge could rule on the legal challenge to the Flint strike; inside the UAW, the fear was that GM would win in court. And that might make Yokich more hesitant to use a local strike to trigger another national shutdown at GM. His option then would be to battle GM on a national level during next year's contract talks. But the cost would be prohibitive: Workers across the nation idled by a local strike can collect unemployment. In a national walkout, the union would have to chew up its $700 million strike fund. "GM would stand a better chance in a confrontation where the union had to pay the whole cost," says Nicholas Lobaccaro, an analyst at Merrill Lynch & Co.

Given its history, GM is likely to wind up closer to the second approach. If so, the relative calm that should prevail for a while could be followed by an even more cataclysmic battle next year. And both sides would be the losers.

By Aaron Bernstein in Washington, with Peter Galuszka in Lordstown, Ohio, and Bob Barker in Melbourne, Fla.



D SOMETHING FOR BOTH

M and the UAW agree to t regularly to try to avoid re disputes. Constant ogue between Ford and UAW has enabled oit's No.2 carmaker to nsize and outsource out a labor strike.

MAJOR UNFINISHED BUSINESS

- GM has no plan for company-wide productivity gains.
- There's no timetable for eliminating the 50,000 workers GM says must go.
- It has not been resolved how much GM can outsource to supplier and foreign plants.

TELECOMMUNICATIONS

BIG MERGERS, BAD SERVICE

Phone customers don't seem to gain much from consolidation

Allan R. Kidd is trying to get the new telephone number of a friend who lives in Boston. He tries dialing 617 555-1212 and gets an operator who works for AT&T, his long-distance company. Even though the friend moved to a new home six months ago, Kidd can get only the old number. Why? Neither AT&T nor local-service provider Bell Atlantic Corp. will give him a straight answer, says Kidd. "It's ridiculous," he says. "There are a lot of phone companies that are abusing their customers."

As merger mania sweeps the telecom industry, investors are cheering the rise in phone stocks, and telecom executives are celebrating the glories of deregulation. The latest twist: On July 28, Bell Atlantic and GTE Corp. unveiled plans for a $53 billion megadeal that will combine a Baby Bell with another local phone company that also carries long-distance traffic.

The deals won't stop anytime soon. The GTE announcement follows merger proposals between SBC Communications and Ameritech and between AT&T cable giant Tele-Communications. with GTE shares sinking on wo its deal, another bid could be f coming: BellSouth Corp. insiders they're considering a merger, per even a counteroffer for GTE.

So far, small-business customers consumers have little reason to joi party. The telco giants promise g new services and competition in th ture. For now, though, the heada of phone service appear to be gro not shrinking. Such services as d tory assistance don't wo well as they used to. den fees turn up on e thing from collect ca pay-phone surcharges. outright fraud is soa "The danger is that as phone monopolies expand zontally, they'll get lackadaisical a service," says Gene Kimmelman, c rector of Consumers Union.

WRONG NUMBERS. Meantime, tele companies, preoccupied with boos their stock prices and sealing on favorable terms, are cu costs to boost profits.

The result? Customers face increasing hassles—and worse—with telephone service. "With more choices, consumers have to be more cautious," warns Federal Communications Commission Chairman William E. Kennard.

How bad are the problems? Phone-related complaints at the FCC soared to 44,035 in 1997, up 25% from and four times the number of compl in 1993. Even the industry's top na have been tarnished. AT&T has been icized for "slamming"—or switc long-distance carriers without a tomer's knowledge. A class action filed against MCI Communications because the rates charged for its 321" dial-around service were hi than advertised.

In some cases, complaints arise mergers. Before SBC bought Pacific sis Group in April, 1997, it had turn nice profit selling Caller ID, so it de to start marketing the servic

WHERE THE GRIPES ARE

DIRECTORY ASSISTANCE Local vs. long-distance rivalry means that up to 10% of the queries in this $4 billion market get wrong answers.

HIDDEN FEES Many phone companies charge fees or rates that customers typically don't know about until they receive their bills.

CRAMMING There has an explosion of cases companies use telcos customers for fraudul vices or products.

Tel's region. But more than half of Californians mask their phone numbers—blocking Caller ID. SBC has tried persuade Californians to drop mask—and some employees have told customers the service isn't available, acling to consumer groups. "SBC has adjusted to the California market, the result has been a steady stream complaints," says Michael Shames, cutive director of the Utility Coners' Action Network. SBC says it's plying with regulations. And the pany has improved service in many s: Since SBC took over, the wait for ew line in California has dropped n as many as 20 days to three or

FLE RACKET. Still, customers con- e to be squeezed between the new istry titans. Consider directory asance. AT&T used to pay all the Baby s a fee so that when AT&T customers ed for information in a different area , a Bell operator would supply num-. But as AT&T tries to compete with local companies, it doesn't want to the Bells for that service, so it gets information from other sources. The lt? AT&T says as many as 10% of numbers given out are inaccurate. Meanwhile, fraud is ballooning. In July, Congress held hearings on umming," which involves putting a e charge on your phone bill. Phone panies aren't part of the fraud, but ause they earn a fee to collect it n consumers, they have little incen- to stop it. One scam began at the 7 Oregon State Fair. Raffle tickets there bore small print notifying testants that they were joining the erans of America Assn. Soon, those ple began getting charges of $4.85 on ir phone bills under the listing of ld Billing." On July 15, the Federal de Commission sought an injunction inst Hold Billing Services Ltd. and other parties.

Petty scams and wrong numbers may m like trivia when a trillion-dollar al industry is restructuring. But the cutives engineering these megamergs should bear this in mind: When the t settles and real competition comnces, consumers will remember how y're being treated now.

By Peter Elstrom in w York, with Catherine Yang in Washington l bureau reports

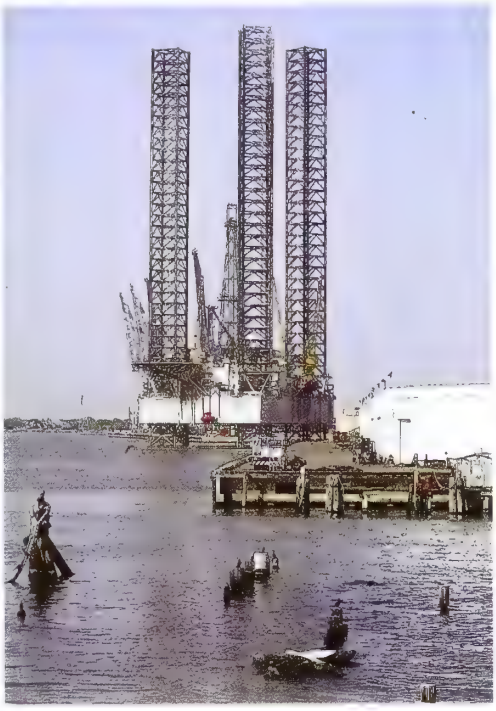
IING Switching ers to a new longe company without nowledge continues ite a fresh crackdown.

ENERGY

SHOTGUN WEDDINGS IN THE OIL PATCH?

With sluggish prices and stocks, oils may have to merge

Have things gotten so bad in the oil patch that you can't give an oil company away? Almost. On July 17, shares of Triton Energy Ltd. sank 32% after the company admitted that it could not find a buyer, despite a four-month effort to sell itself. Rutherford-Moran Oil Corp., on the block since January, has encountered the same lack of interest. No wonder the total value of mergers and acquisitions in the first half of 1998 was just $7.9 billion, compared with $24 billion for all of 1997.



UP FOR SALE? *Rigs await work in Galveston*

But the sweeping lack of enthusiasm for M&As in the oil patch may be deceptive. In fact, analysts and investors are convinced that the depressed price of oil and natural gas—and sagging oil stocks—must lead to consolidation. Oil watchers argue that the industry, including the biggest players, will follow banking, telecommunications, media, and insurance in a massive restructuring that squeezes out excess capacity and leaves fewer, but presumably healthier, companies.

Sure, oil companies have been downsizing, cutting back, and divesting their non-energy assets. But that only goes so far. "Even without the oil price decline, the ability to improve returns at the major oil companies from internal self-help has come to an end," says Michael Kerr, senior vice-president at money manager Capitol Research & Management Co., based in Los Angeles.

So how will the dealing begin? Middle-tier oils, such as Mobil Oil, Chevron, Amoco, Phillips Petroleum, and Amerada Hess, are all prime candidates, says Stan Majcher, equity analyst at money manager Hotchkis & Wiley.

Up until now, such companies have mostly bought smaller prey. But that could change this fall when DuPont is expected to begin divesting its $22 billion Conoco unit. A bid for Conoco could put the entire sector into play. Among the companies rumored to be eyeing Conoco: Texaco, Atlantic Richfield, and Mobil, which lost out when DuPont won the bidding war for Conoco in 1981. Says Tom Moore, an analyst at Boston-based money manager State Street Research & Management Co.: "I'd be surprised if every one of the majors wasn't looking at Conoco."

The reason: Second-tier majors need to match the economies of scale of Exxon Corp. and Royal Dutch/Shell Group to improve their performance. The two behemoths command a price-to-earnings premium as much as 30% greater than smaller peers, says analyst Majcher. His conclusion: "The market is saying, 'Size is everything.'"

Meanwhile, the smaller independents are also on the prowl. "We are in the boat, shotguns loaded, waiting for some plump ducks to fly over," says Raymond Plank, who turned Apache Corp. into a top independent through rapid-fire deals. He believes valuations will continue to fall. And Salomon Smith Barney analyst Keith Petersen agrees: "Unless oil moves back above $16 a barrel and gas above $2 a thousand cubic feet, the financial pain may well drive a lot of companies into the arms of someone else." Given the slim likelihood of such hikes, it's time to get ready for the revival of oil-patch mergers.

By Gary McWilliams in Houston

EXECUTIVE SUITE

'WE HAVE TO REBUILD OUR CREDIBILITY FROM THE GROUND UP'

Can Silverman rescue Cendant now that Forbes is gone?

The truce came on July 28, after a seven-hour board meeting. Cendant Corp. announced that its chairman, Walter A. Forbes, and eight of his allies on Cendant's board had resigned. A ninth Forbes-allied director will leave by yearend. That ended an ugly public battle between CEO Henry R. Silverman and Forbes that erupted after massive accounting irregularities surfaced in businesses of the former CUC International Inc. That was the company that Forbes merged with Silverman's HFS Inc. to form Cendant, a company that includes membership buying clubs and a host of businesses, including Avis and Century 21.

Now, Silverman's real battle—to put Cendant back on track—begins. "There is no joy in this," says Silverman, who was elected chairman on the 28th. "We have to rebuild our credibility from the ground up."

Investors will be watching Silverman like a hawk. Cendant faces more than 68 shareholder suits that have been filed since its stock went into a meltdown following the April disclosure of the accounting mess. One major investor says he will soon push for a smaller, more independent board at Cendant to replace the remaining 18-person group, many of whose members go back years with Silverman. "When something like this happens," says Hans Utsch, president of the Kaufmann Fund, another large Cendant investor, "[Silverman] can't help but get somewhat tainted."

ON SALE. That's why Silverman, a dealmaker who once had a fanatical following on the street, is likely to take aggressive steps to boost Cendant's stock price—initially by unloading CUC assets. He says he has received overtures from interested parties. One candidate for sale is Hebdo Mag International, a CUC publisher and distributor of international classified advertising. Silverman is also weighing a sale of part of some CUC software businesses. In addition, he's contemplating a partial initial public offering of CUC's Internet-based membership operations, a big Forbes initiative. "We will be a net seller of businesses going forward," he says.

These moves could raise more than $2 billion in cash, Silverman figures. That could be used to buy back Cendant shares, pay down debt or restruc Cendant's pending $3.1 billion acc tion of credit insurer American Bar Insurance Group. Some Cendan vestors worry that the ABI deal wou dilutive at current stock prices, and prefer to see the deal done with all

Silverman also needs to improv performance of the discount-buying business, where much of the b bookkeeping occurred. He says the pany will overhaul its membership keting to make sales pitches targeted. And to avoid managemen fections, Cendant will reset exe prices on about 14 million options by 4,000 middle managers at Cend

TORPEDOED. Despite the turmoil—even without asset sales—analysts Cendant is on track to generate st earnings this year. Merrill Lynch & analyst Mark R. Miller pre 1998 earnings could reach million on sales of $5.7 bi Still, future growth will be er than investors expecte fore the accounting sca erupted. The accounting i ularities within CUC, w Forbes founded and ran, pedoed Cendant's 1997 e ings. After restating thos sults, Cendant's 1997 income after charges shran $200 million to $250 millio around $620 million. CUC's and 1996 results will als revised downward.

The costly accounting c cle set off the Forbes-Si man battle that ended in July 28 meeting. Sources to the company say that the auditors for Arthur dersen & Co., hired to through CUC's books, through their latest findin the meeting, directors sa stunned silence. In a state issued that evening, Fo said he was resigning "t solve this uncertainty." Fo will get severance of $35 lion in cash plus options ued at $12.5 million.

Silverman says that the scandal broke, he has sulted a psychiatrist who cializes in stress. The pres tion? Daily tennis or we training to relieve tensio if Silverman's plan doesn't cate investors, he may even more time in the gy

By Amy Ba in Philadel

AND FOR HIS NEXT ACT...

Cendant CEO Henry Silverman still faces big hurdles:

- Regaining confidence among investors angered over the 55% decline in Cendant's share price since April.
- Resolving more than 68 shareholder lawsuits filed since the accounting scandal broke.
- Improving margins of the discount-buying-club business, where most of the accounting problems occurred.
- Selling off noncore businesses, most likely including software operations. That cash may be used to buy back stock.

DATA BUSINESS WEEK

By John A. Byrne

HOW EXECUTIVE GREED COST SHAREHOLDERS $675 MILLION

On July 22, Computer Associates International Inc.'s shares sank nearly 31%, to 39½. Sure, the market was off that day. Yes, the company did warn that earnings and sales growth would be adversely affected for several quarters by the Asian meltdown. But really, the thrashing the stock took can be attributed to one item in its first-quarter report: a $675 million aftertax charge taken to pay three top executives, including Chairman and Chief Executive Officer Charles B. Wang, $1.1 billion in stock. Before the charge, the company earned $194.2 million; after the charge, it lost $480.8 million.

Even for Wall Street, the greedy excess was shocking. But what's more remarkable is how this could happen—and with shareholder approval.

COMPUTER ASSOCIATES CEO WANG

The pay package, which received a nod from 78% of voting shareholders in their 1995 proxies, called for giving, not selling, CEO Wang, President Sanjay Kumar, and Executive Vice-President Russell M. Artzt more than 20 million shares if the company's stock closed above 53.33 for 60 days in a 12-month period. Wang was handed more than 12 million shares, then worth $670 million, while his two subordinates got the remainder, worth $447 million. The charge itself—the largest ever declared by a public company for executive pay—equaled 43% of Computer Associates' entire net income for the three previous years.

POOR CRITERIA. Compensation plans that offer incentive rewards to executives based on hitting a stock price target are nothing new. In fact, they are generally thought to be shareholder-friendly, because at least they ensure that investors make money before executives do.

Clearly, Computer Associates' executive largesse is extraordinary. But it illustrates a fundamental flaw of incentives tied to stock prices when used in a bull market. When all boats are rising on the same powerful tide, a company's stock price is a flimsy measure of a company's actual strength and provides an equally bad yardstick with which to size up bonuses or pay. Almost uniformly, these plans do not take into account relative performance in either the overall market or in a company's industry group. In Computer Associates' case, some 44% of the companies in the Standard & Poor's 500-stock index racked up greater stock gains than CA since the plan won board approval in 1995.

A good deal of the blame for this should go to Computer Associates' compensation panel, which recommended the plan to shareholders. The three members of that committee are Richard A. Grasso, chairman and CEO of the New York Stock Exchange; Willem F. P. de Vogel, president of investment advisers Three Cities Research; and Irving Goldstein, CEO of Intelstat, a satellite-telecom company.

> "[The executive pay proposal] was deliberately designed to be misleading and obfuscating"
>
> **GRAEF "BUD" CRYSTAL**
> *Executive pay critic*

None could be reached for comment. A spokesman defended the plan, saying it was designed to "enhance shareholder value for all CA shareholders."

But why would shareholders O. K. a plan that would severely hurt earnings? At the time, the company was doing extremely well—total shareholder return was a remarkable 93% the year before. "Whenever you perform like that, shareholders are likely to support just about anything," says Patrick S. McGurn, a vice-president at Institutional Shareholder Services, which urged a "no" vote on the plan.

PLAIN SPEAKING. Even in such flush times, however, shareholders might have thought twice had they fully appreciated the cost. Pay proposals are often written in language that's difficult even for pros to fathom. The way the Computer Associates options were presented was particularly opaque, says Graef "Bud" Crystal, the executive pay critic. "It was deliberately designed to be misleading and obfuscating," he says. Crystal says he would have had to do a day's worth of computer modeling to figure out the plan's impact.

That shouldn't be necessary. To help shareholders understand what they're voting on, the Securities & Exchange Commission should consider new rules forcing companies to spell out a resolution's implications and potential consequences. For instance, every new pay plan should have an impact statement detailing the potential cost to shareholders in dilution or charges to earnings. If Computer Associates' investors had understood that they were voting to erase hundreds of millions of dollars of net income, it's highly unlikely the billion-dollar pay pack would have passed. The SEC needs to act now to make sure that shareholders in other companies do not find out too late how much lush executive pay has cost them.

Byrne is a senior writer covering corporate governance and executive excess.

COMPUTERS

A BABY MAC ATTACK

Why Apple is promoting the iMac so fiercely

On Aug. 15, Apple Computer Inc. will stage what promises to be the flashiest computer launch in a decade. The big buildup is for the iMac—the hip little sister to the Mac that master showman and temporary Chief Executive Steven P. Jobs previewed to adoring fans on May 6. Apple is expected to promote the iMac—its first new consumer line since 1995—as if the company's life depended on it. In fact, some analysts think it does.

Sure, Apple has other goodies in the works—including an updated G3 desktop computer later this year and a new consumer laptop in 1999. But many analysts believe that if Apple is to regain a respectable share of the PC market and a new lease on life, the iMac launch must live up to the hype and attract more than the Apple faithful. "If it does not work, Apple is running out of options," says Goldman, Sachs & Co. analyst Richard Schutte.

While Jobs has breathed financial life into Apple since retaking the helm a year ago, he has yet to get its top line growing again. The June quarter—its third straight in the black—exceeded analysts' expectations. But revenue was flat, and unit sales actually fell 2% from the seasonally lousy March quarter. Apple's worldwide market share remains a paltry 3%. For the calendar year, revenue is expected to grow just 6%, compared with 42% for Dell Computer Corp. and 22% for Gateway Inc., says Schutte.

Apple can't nudge those numbers up simply on the strength of revised sales to Mac buyers in the education and publishing markets. "If Apple is to get back in the hunt," says J.P. Morgan Securities analyst Daniel R. Kunstler, "it's going to have to be through the consumer market."

So Apple is swinging for the fences with iMac, a $1,300, one-piece machine in an eye-catching translucent package. Apple plans to crank out more than 650,000 iMacs in the next four months, analysts say. "By Aug. 15, you won't be able to turn around without bumping into an iMac, whether it's on TV, on billboards, or online," says Lou Mazzucchelli, an analyst with Gerard Klauer Mattison.

Who will buy them? While roughly 10% of Apple's consumer custom have been defecting each year to W PCs, there are still 10 million Mac ers—37% of whom, the company have not upgraded in four years. A also has its sights on the 100 mi U.S. homes that still have no PC well as the education market. If A can hold on to its customers and r the 1.5 million iMacs analysts expe to sell, Mazzucchelli predicts that A could have nearly 5% of the marke the end of next year.

SOFTWARE SHORTAGE. iMac certa has revived consumer interest. Anal say retailers already have ord 100,000 of the computers, and Cr Suisse First Boston analyst Charles thinks the company sell 800,000 by year That kind of boom w drive unit sales up 28 the quarter ending in tember and 67% Christmas season.

But there's a less mistic scenario: Consu who love the iMac's fl design may be scared by the continuing rea that more software available for Wintel Macs. Most develo write for Windows and for Macs when t get around to it—w sometimes means ne Another problem: iMac lacks a floppy d Consumers will have to pay for an on drive or figure out how to send over the Internet—which could m snagging newbies more difficult. prototype's slow modem, however, been replaced with a faster version

Also, the iMac may look quite pr by the time Christmas rolls around Intel-based PCs are expected to slip low $600 without a monitor. "All iMac can do is sustain the Apple c little longer," concludes PC analyst mour Merrin of Merrin Informa Services Inc. "It's not going to b new people in."

Jobs needs to prove the skep wrong. And even some closest to need convincing. "Steve's doing a g job, but repeating this over and will be very hard to do," says Jos Graziano, Apple's former chief finan officer and a director at Jobs's P Animation Studios. "Even if the s term looks pretty good, the long ter cloudy." Could the iMac be Jobs's ver lining?

By Peter Burrows in San M

BLUE SKIES? This is Apple's best and perhaps last chance to regain a respectable market share. But pizzazz and sleekness may not be enough

SCENARIO A: A HOMERUN

YEAR*	iMAC UNITS	APPLE MKT. SHARE	APPLE REVENUE‡
1998	300,000	3.0%	$5.9
1999	1.7 million	4.5%	$7.7

SCENARIO B: A STRIKE OUT

1998	150,000	2.5%	$5.0
1999	500,000	2.4%	$4.9

SCENARIO C: A BASE HIT

1998	200,000	2.8%	$5.7
1999	1 million	3.25%	$6.6

*Fiscal year ending Sept. 30 ‡In billions

DATA: GERARD KLAUER MATTISON & DATAQUEST INC

'ILL MURDOCH LAND STARRING ROLE AT PRIMESTAR?

may control the satellite service and Germany's Kirch, too

When Rupert Murdoch announced plans to sell part of News Corp.'s juiciest entertainment assets in nitial public offering on June 29, in- ors applauded. The swashbuckling dia baron—famous for debt-escalating ls—was trying to clean up his bal- e sheet and unlock some shareholder ue from far-flung assets.

ut Murdoch's dealmaking days aren't r. The News Corp. chairman is now ing in on two prizes he has long eted: a satellite-TV service for North erica and a strong foothold in Ger- y. In the U.S., News Corp. is an- g for a big voting stake in Primestar , the direct-broadcast satellite ser- controlled by Tele-Communications and Time Warner Inc.

SMIC COBWEBS. In Germany, Eu- e's richest TV market, Murdoch is ling fellow mega-investors Silvio lusconi and Saudi Prince Alwaleed Talal bin Abdulaziz Alsaud in a bid 20% of privately held Kirch up for about $2 billion. Based Munich, Kirch boasts a Ger- n-language library of more than 000 films, from *Citizen Kane* to *Apol- 13*, and co-owns the TV rights to rld Cup soccer in 2002 and 2006. Murdoch could be the right mogul in right place at the right time in both es. Primestar's cable owners attempt- to bring Murdoch in as a nonvoting % partner a year ago to neutralize his ns to start a rival satellite service. t on May 12 the Justice Dept. sued to ash the deal, saying it was designed to it competition against cable. The five le companies behind Primestar are w looking to settle by reducing their kes or even exiting completely.

Murdoch and Primestar—the second-biggest satellite service with 2.1 million subscribers—sorely need each other. Murdoch owns high-powered satellites and orbital slots he purchased with MCI Communications Corp. back in 1996, and they have been gathering cosmic cobwebs ever since. For now, Primestar is making do with a medium-powered service and offering fewer than half the channels of rivals DirecTV and Echostar Communications Corp.—and it shows. According to researchers Carmel Group, while DirecTV added 80,000 subscribers in June and 70,000 opted for rival Echostar, only 14,200 turned on to Primestar. "Clearly, [News Corp.] has the assets we need to execute our business plan," says Carl Vogel, Primestar's chief executive.

Neither Vogel nor News Corp. would comment on the bidding. But according to Time Warner Chairman Gerald M. Levin, whether Murdoch gets Primestar is "an economic question as to whether there's another buyer." Who might vie with Murdoch? Satellite maker Loral Space & Communications Ltd. and General Electric Co., which already owns 10%, are likely contenders. Another possible spoiler is TCI, which sources say may try to hang on to its 37% Primestar stake through programming arm Liberty Media. Sources say TCI may argue that after its pending acquisition by AT&T Corp., the Primestar stake will no longer conflict with its cable interests. Analysts say Primestar could be worth anywhere from $2 billion to $4 billion.

Meanwhile, across the Atlantic, Murdoch has been negotiating with Kirch Group's 71-year-old founder, Leo Kirch, since June. Sources familiar with the talks—code-named Project Traviata—say Murdoch plans to inject $1 billion, Berlusconi $600 million, and Prince Alwaleed up to $400 million in the company in exchange for a combined 20% stake. Kirch and Murdoch have recently compromised on price, and a deal could come by late August. It would get Murdoch and his partners immediate access to the $4.2 billion German TV advertising market. The long-range goal: a public offering of Kirch in about two years.

Neither deal will be easy. With Primestar, for example, Murdoch is aiming to avoid using any cash, offering satellite assets instead. And if he closes that deal, he'll have an old fight on his hands again. "If he ends up with Primestar, he's back competing with the cable industry," says Carmel Group Chairman Jimmy Schaeffler.

Also, investors hoping for more consistent News Corp. profits might have cause to worry. "DirecTV [after four years] is just breaking even now," says analyst Robert B. Kaimowitz at C.E. Unterberg Towbin Inc. in New York. "Is it worth it?" As he chases his deals, Murdoch is no doubt pondering the same question.

By Richard Siklos in New York, with David Woodruff in Frankfurt, John Rossant in Rome, and Steven V. Brull in Los Angeles

MURDOCH'S DREAM DEALS

the U.S., News Corp. May Try Take Control of Primestar

Control would advance Murdoch's global satellite ring, ut could put him at odds ith U.S. cable again

Primestar would finally have igh-powered service, but competion with DirecTV and Echostar ill be fierce

In Europe, Murdoch Seeks Investment in Kirch

▶ The German film distributor has a library of more than 15,000 films and TV rights to World Cup soccer in 2002 and 2006

▶ News Corp. and partners would be players in a $4.2 billion advertising market

COMMENTARY

By John Carey

HUMAN CLONES: IT'S DECISION TIME

The idea of cloning an adult human, a staple of science fiction that was once thought biologically impossible, has taken a great leap into the present. With the July 22 news that scientists had cloned 50 mice from adult mouse cells, we learned that the near magic which produced Dolly the sheep two years ago can be reduced to an almost humdrum process. "We can now sit down at a microscope and create a clone whenever we want," says Laith Reynolds, chief executive officer of ProBio America, the small Hawaiian company that owns the rights to the mouse-cloning method.

Reynolds disavows any interest in human cloning ("We don't see a business there," he says). But others do, and the potent combo of strong demand and scientific progress means attempts to copy people are inevitable—and imminent. "I don't see how we can stop it from happening," says Princeton University biologist Lee M. Silver.

That's not a problem for many top scientists like Silver. "Cloning will enable babies to be born into families that want them," Silver argues. "How much better can it get?"

GENETIC MANIPULATIONS. But it's not that simple. Cloning is not just an infertility treatment—it's a quantum leap over past advances such as in vitro fertilization. The truth is, we're not ready for this step, philosophically or ethically, even if science is. "What would it mean to be the genetic copy of someone who has already lived?" asks University of Chicago professor Leon R. Kass, co-author of *The Ethics of Human Cloning*. "This is really a major step toward regarding our children as acceptable only if they conform to the choices of our will." Cloning turns creation of children into something akin to manufacturing, with physical traits (though not personality and behavior) preplanned.

The issue takes on complexity when we consider that cloning itself is only the tip of the iceberg of potential genetic manipulations. The reason British scientist Ian Wilmut created Dolly in the first place was to try to speed up production of animals that have been genetically engineered for certain traits. He already has cloned sheep that produce drugs in their milk.

No one is suggesting turning people into drug factories, of course. But think about the temptation for short or slight people to slip in new genes that would make their clones taller or stronger. And you don't have to be paranoid to imagine how such manipulation could be harnessed to produce "superior" humans.

Advocates of human cloning "are making a very big mistake of forgetting or ignoring that gene-transfer technology could be employed along with cloning," says Hastings Center philosopher Erik Parens. "We haven't yet scratched the surface of these issues." Even now, there's debate over using available technologies, such as human growth hormones, to "fix" such mistakes of nature as short stature.

What to do about human cloning? A temporary ban seems a reasonable stopgap, but anything too extended would prove counterproductive. As Rabbi Barry Freundel observed at a congressional hearing earlier this year: "Should we not be concerned that a banned technology will simply be driven underground, where the possibility of unsafe, unregulated, ar exploitive misuse is far more likely?

In the Bahamas, an outfit called Clonaid set up shop in early 1997 to offer cloning. And, according to Brigitte Boisselier, its scientific direc tor, more than 100 people—infertile heterosexual couples, gay couples, a a few singles—are interested in pay ing Clonaid's fee of $200,000 and up for taking the historic leap. "Before the year 2000, there will be a huma cloned on this planet," she says. A former research director fo a French chemical com pany, Boisselier has a special dedication to getting the job done: As a member o the Raelian movement, she believes that extraterrestials created life on earth and that cloning will be the se cret of eternal life.

Such is the lure of cloning that pe ple are willing to overlook Boisselier unorthodox view and hand over thei savings on the chance that Clonaid can deliver the goods. The message i this: We won't stop human cloning from arriving on its new, accelerated timetable. So the best we can hope for is to be able to address the ethic questions on a similar schedule. Cloning is not just a Xerox machine for our genes. It's a window into our souls as well.

Senior Correspondent Carey cover science issues from Washington.

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MICHAEL PRICE MAKES HIS MOVE

EVER SINCE MICHAEL PRICE sold his Mutual Series funds to Franklin Resources in 1996 for over $600 million, it seemed only a matter of time before he bowed out. Sure enough, on July 28, Price announced that his deputy, Peter Langerman, 42, will be CEO of Franklin Mutual Advisers, and Robert Friedman, 38, chief investment officer. Price, 47, will remain chairman of the boards overseeing the advisory firm and the $32 billion fund group. Price is otherwise vague about his plans, but he likely will still keep a close eye on the funds: He could collect another $130 million from Franklin depending on fund asset growth. They've grown $13 billion since the sale, but Price's successors must boost performance to sustain that pace. The funds' 17.4% stake in Sunbeam, off 78% this year, has shaved three percentage points from returns, Price says.

CREDIT UNIONS 1, BANKS 0

DESPITE FIERCE LOBBYING BY banks, the Senate on July 28 voted to restore the right of credit unions to add members from more than one company or other group. The move reverses a Supreme Court ruling that credit unions could only accept members with a single "common bond." That raised the specter of thousands of credit unions being busted up. The White House wants the Senate to impose community-lending requirements on credit unions. But President Clinton is expected to sign the bill.

WARNING: DANGEROUS E-MAIL

SECURITY SPECIALISTS HAVE found serious flaws in E-mail programs in Microsoft's Outlook Express and Outlook 98 and Netscape's Communicator E-mail. Malicious hackers could use the systems to damage computers. Microsoft and Netscape are working on patches and have begun posting fixes on their Web sites. "It's a race between us and the hackers to get there first," says George Meng, product manager for Microsoft Outlook.

DOWNSHIFTING AT TRW

TRYING TO CONTEND WITH razor-thin margins in its struggling auto parts business, TRW is shrinking. The Cleveland-based company plans to shutter as many as 20 of its 137 manufacturing plants and lay off some 7,500 workers. It also will take pretax charges of up to $150 million by 2000. TRW hopes that the moves will increase operating profit margins and improve cash flow by about $100 million over two years. Auto parts represent about 60% of TRW's nearly $11 billion in revenues. The recent strike at General Motors exacerbated TRW's problems, but the business had already been under pressure to boost margins.

PATENT PLETHORA PENDING

LIFE AT THE PATENT & TRADEmark Office could become a lot more hectic. That's because a July 24 ruling by the Court of Appeals for the Federal Circuit in Washington will make it easie patent financial innovat by patenting the comp programs and models underlie them. The dec overturned a lower c ruling that a mutual- operating system devise Signature Financial Grou Boston was a "metho doing business" and h could not be patented. result? Peter Trzyna Chicago patent law predicts "a flood" patents.

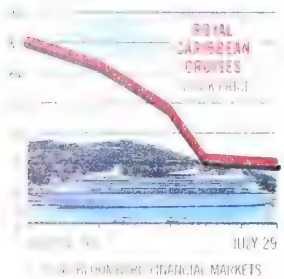
ET CETERA . . .

- Merck, faced with a re stock price drop, is plan a $5 billion share repurch
- Bagel with your Joe? I World Coffee & Bagel buying Manhattan Bage
- Royal Philips Electroni buying ATL Ultrasound about $800 million.
- Beating rival UUNet, PS will offer corporate custor Internet phone-calling.

CLOSING BELL

WE'RE SINKING

Royal Caribbean Cruise Line reported a 93% jump in quarterly earnings, but shares sank 5 to 75⅝ on July 27. Investors got queasy when Royal Caribbean said it may sell the Viking Serenade, one of its oldest ships. Analyst Peter McMullin of Southeast Research Partners says the ship accounts for 5% of capacity and its sale might limit revenue growth and flatten earnings next year. Going forward, he says Royal shares could be buoyed by higher prices, new ships, and strong consumer demand.



HEADLINER: WILLIAM BAUMHAUER

MAN WITH THE GOLDEN BURGER?

Can the man from Fuddruckers save the Planet? William Baumhauer, who on July 27 jumped from Unique Casual Restaurants, parent of the Fuddruckers chain, to be president and COO of Planet Hollywood International alongside CEO Robert Earl, has his work cut out for him.

Profits at the star-studded restaurant chain tumbled 92% in the first quarter, to $894,000, due to increased competition and slower sales of souvenir items. Planet Hollywood is slowing its expansion plans and has hired bankers to explore options. Its stocl trading at around $6 a share, down from a peak 28½ in 1996. "The com ny still has to demonstrate th it's going to be success befor Wall Street reacts," says Arnold Ursar an analyst at Securities. Baumhauer, 50, says he'll win over the Street; his compensatio will be mainly in stock options. In his 15 years running Fuddruckers, h doubled the chain, to 20 restaurants, and in 1996 was cited for outstandin achievement in food ser- vice by an industry grou

By Dennis Bla

ITED BY OWEN ULLMANN

IR. STARR'S ENDGAME AS EVERYONE RUNNING SCARED

s Independent Counsel Kenneth W. Starr presses the endgame in his probe of Bill Clinton, the President—noted for his agility in escaping legal snares—is rapidly ning out of room to maneuver. But Clinton's luck may hold a little bit longer: For very different reasons, neither his ublican antagonists nor his dwindling band of Democrat-lefenders seem inclined to deal with a Presidential sex ndal on the eve of the November elections.

Starr's July 28 immunity deal with former White House in-n Monica Lewinsky—and the President's decision to give eotaped testimony in the case on g. 17—represent the most serious eat yet to Clinton's heretofore rmed Presidency. But rather than ulting, congressional Republicans are ry of launching an all-out assault on White House. The reason: If all rr has is evidence that Clinton lied ler oath about consensual sex with winsky, that's not enough to capsize a sidency.

The special prosecutor is expected to d his report to Capitol Hill as early September. And Starr could still drop ombshell that points to a White use pattern of obstructing justice in a ing of scandals from Whitewater to the Lewinsky affair. rring that, there is bipartisan sentiment to defer the issue il next year.

Why are Republicans being so cautious? They're still gun- about taking on a popular President whose job approval ing was 63% in a Harris Poll taken on July 17-21. What's re, pollsters say most voters don't consider lying about sex anging offense. With the GOP holding a tenuous majority in House, party leaders fear a partisan ethics assault could ark a voter backlash. Republicans also think they're doing e without raising the specter of impeachment. "If all else remains constant, we'll pick up seats in November," says GOP consultant Ed Gillespie. "Now there's this wrinkle, and you don't know if it'll spin out of control. If Republicans let it play out, it's less likely to boomerang."

For now, GOP leaders are urging their followers to hold their tongues. With little time left in the congressional session, they would rather concentrate on passing a few symbolic bills to deflect Clinton's charges of a "do-nothing" Congress. They're taking this tack because even a wounded Clinton can still marshal public opinion on such issues as health care, Social Security, and education.

SHALLOW BENCH: *Clinton and his team*

Hill Democrats have their own reasons to postpone a showdown. They're afraid that a congressional inquiry will uncover damaging new evidence that would force Democratic office-seekers to choose between defending the President or distancing themselves from him. "We're going to duck until more facts become available," says a senior House Democratic strategist. "You won't hear many people up here defending Clinton." Instead of expressing their support, many Hill Democrats are giving Clinton free legal advice: "He should give his testimony," says Senator Dianne Feinstein (D-Calif.). "One way or another, the facts are going to come out."

To complicate Clinton's problems, some key members of his support network may be bailing out of his foxhole. Press Secretary Michael D. McCurry is leaving, and Chief of Staff Erskine B. Bowles is likely to follow.

Up to now, Clinton's stalling strategy has served him well. And he's being helped by GOP reluctance to go head to head. But if Starr continues to poke holes in the President's defense, it may be cold comfort for Clinton that his day of reckoning comes later rather than sooner.

By Richard S. Dunham, with Amy Borrus

CAPITAL WRAPUP

NO-HOLDS'-BARRED FIGHT

One of the Senate's most potent weapons is under siege. Majority Leader Trent Lott is mulling a plan to suspend, on a trial basis, the right of senators to keep secret the indefinite "holds" they can put on nominations and bills. Senators Ron Wyden (D-Ore.) and Charles E. Grassley (R-Iowa) are pushing for a rule change that would force senators to disclose such holds. It'll be a tough battle: Their colleagues cherish the power to stymie the Senate anonymously.

HOPEFUL SIGN IN TOKYO?

► Wall Street is disappointed with the selection of Keizo Obuchi as Japan's new Prime Minister. They doubt he has the moxie and vision to pull his nation's economy out of recession. But officials in Washington see hope in Obuchi's selection of former Prime Minister Kiichi Miyazawa as Finance Minister. Miyazawa played a key role in a 1987 accord that stabilized the dollar. More recently, Miyazawa helped devise a plan to clean up Japan's troubled banks.

SLIDING SUPPORT FOR SANCTIONS

► Trade sanctions are losing their allure in the Senate. A bill penalizing nations that practice religious persecution is having trouble rounding up votes to get out of committee. Sixty senators recently approved an exemption for food and medicine from all sanctions. And support is building for a bill to require cost-benefit analyses for sanctions. The measure would get a boost if a special Senate panel studying the issue takes a dim view of economic sanctions.

CHINA

CHINA'S ARMY UNDER FIRE

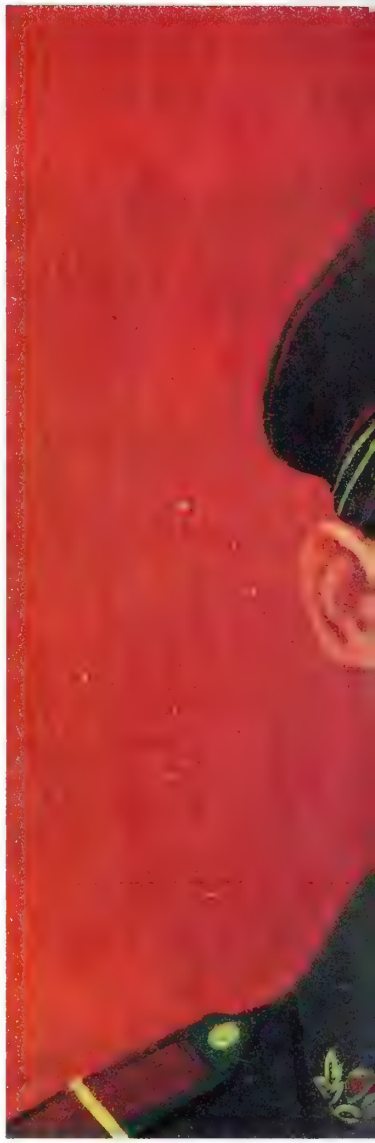
Can Jiang push the PLA to give up its complex web of businesses?

For a Chinese military chauffeur, it was all in a day's drive. After all, there was a traffic jam and his boss wanted to impress the American guests in the back of his big black Lexus. So the chauffeur turned on his siren and flashing red light and swung onto a crowded sidewalk in the southern Chinese city of Guangzhou. The driver barked through the car's loudspeakers at pedestrians, scattering them in his path. Then the sedan zipped ahead of the congested traffic. For the American executive in the car, who was considering a business venture with a People's Liberation Army-linked company, it was a powerful testament to the might of the Chinese military and the carte blanche that its official license plates provide. "I was impressed," says the executive.

But the PLA's delight in running roughshod over the country since the military plunged into business more than a decade ago no longer impresses China's leaders. In late July, President Jiang Zemin ordered the PLA to get out of business. So far, Beijing hasn't spelled out a precise strategy for forcing the military to divest itself of thousands of commercial interests that span pharmaceuticals, autos, and telecommunications. But many analysts believe the campaign is for real. "This is the most serious effort ever to rein in the PLA's activities," says Tai Ming Cheung, a senior director at Kroll Associates (Asia) Ltd. and a longtime PLA watcher.

GETTING RICH. Why would Jiang, just when China already is undergoing wrenching change caused by an overhaul of state industry, take on one of the most powerful forces in Chinese politics? Besides the messy process of privatizing so many army businesses, Beijing must decide which companies relate to "core" businesses such as producing weapons, many of which will remain within the military, and how to compensate the PLA for cash cows that generate anywhere from $1 billion to $3 billion in annual profits. Nor will it be easy to force the PLA out of such lucrative businesses as telecoms. In this battle, though, Jiang has plenty of allies. Many senior military and civilian leaders are now concerned that the military is concentrating more on getting rich than on defending the motherland.

To the outside world, a Chinese military that is more intensely focused on boosting its fighting capability may seem threatening. But many Western analysts view the reforms as good new more professional military will be e for Washington to deal with and r cautious in throwing its weight aro they reason. Also, Jiang's reforms c make it harder for rogue officers to barrass Beijing overseas by traffic in everything from missiles to assau fles. "To the extent to which strengthens civilian oversight, it wi a good thing," says a Clinton Adm tration official.



ISSUE	GOAL
▶ Military smuggling and corruption hurt industry. Overall, smuggling costs $12 billion a year in lost customs revenue.	Crack down on cheap, smuggled imports to alleviate pressure on currency and exporters; improve collections at customs
▶ Freelance military arms and missile sales to Pakistan and Iran—and AK-47 smuggling to the U.S.—have flustered Beijing.	Reassert top-level control over the military and prevent any further diplomat embarrassments.
▶ Soldiers spend too much time making money and not enough being a professional fighting force.	Return the focus to soldiering; build a professional force commensurate with China's aspirations as a world power.

THE PLA'S BUSINESS DEALINGS

China's military operates more than 15,000 ventures, most of them small, with revenue of some $18 billion a year. The key sectors:

TELECOM The PLA has laid most of China's optical fiber communications lines and used access to communications facilities to develop telecom companies. Ventures include China Great Wall Telecom and a $90 million paging operation with GTE.

PHARMACEUTICALS The army owns 10% of the industry, including Shenzhen-based 999 Enterprise, which produces traditional Chinese medicines.

REAL ESTATE The PLA has an estimated 1,500 hotels, including the five-star Palace Hotel in Beijing. Its China Poly Group is a major real estate holder with stakes in luxury housing and the new Shanghai Stock Exchange.

SMALL ENTERPRISES The army operates mines, auto factories, textile mills, and restaurants, discos, and karaoke bars, including ones that front for prostitution.

It is China's rapidly deteriorating nomy, however, that forced Jiang to . The army's insatiable lust for wealth ıow disrupting the economy. Massive uggling by PLA-linked black marke- rs is destabilizing industries from oil lling to steel—and may even be tting pressure on China's currency. litary units are undermining central ns to manage the development of the ecom and auto sectors. The PLA's vast l estate holdings, which range from ıple hostels to Beijing's swanky lace Hotel, have added to China's real ate bubble. Then there's the PLA's en defiance of securities regulators d law enforcement agencies.

Analysts and company officials say e decision to wean the military off siness was made early this year, al- ough haggling over how to compen- te the PLA delayed the public an- uncement. Estimates are that the PLA dget—which already was hiked by .8% this year even though inflation is ly 3%—will increase an additional $200 million to $300 million annually. Analysts now believe that military spending, officially listed as $10.9 billion, is up to four times higher.

The reason former leader Deng Xiaoping encouraged the PLA to get into business was to cushion the impact of a slowdown in defense spending and divert precious funds to modernizing the economy. In return, the PLA could exploit the many money-making opportunities opened up by market reforms. Since then, the PLA's business empire has grown enormously. More than 15,000 military businesses generate sales of up to $18 billion, equal to about 2% of the gross domestic product, according to Kroll's Cheung.

The final straw, however, may have been the virtual collapse and forced merger in mid-July of one of the country's largest brokerages, J&A Securities. J&A, reputedly controlled by high-ranking PLA officers, had been under investigation for some time. Officials effectively closed the shop by melding it into staid Shanghai-based Guotai Securities.

The PLA's chronic involvement in smuggling also prompted Jiang to act. In the past year, a flood of autos, steel, chemicals, and other products smuggled in through naval ports has battered domestic producers. With its untouchable status, the PLA is responsible for much of this smuggling, which costs China $12 billion a year in lost tariffs and import duties alone, according to official sources.

Smuggling has also accelerated China's deflation: Consumer prices plunged by 3% in June, and some petrochemical prices have fallen by more than 30%. It also may help explain why foreign reserves grew by just $1 billion in the first half even though China reported a $22.6 billion trade surplus. If so, China's currency, which Beijing has pledged to keep pegged at 8.3 to the U.S. dollar, may not be as fairly valued as many economists think. "When smuggling increases so rapidly, it puts pressure on the yuan," says Song Guoqing, a Beijing University economist.

EAGER. Jiang's decree has left companies scurrying to figure out what it means. One of the biggest question marks hangs over the telecom sector. The PLA has used its communications expertise and its control over vast swaths of radio frequencies to become a major player. PLA-controlled China Great Wall Telecom has been charged with developing a mobile-phone network based on the American CDMA standard. Motorola, Lucent, Qualcomm, Nortel, and Samsung have carried out CDMA trials in different Chinese cities in hopes of winning contracts. Uncertainty over Great Wall's future is likely to further delay the launch of any CDMA system.

GTE Corp. also is eager to know what Jiang's order means. The Stamford (Conn.)-based telecom company has one of the biggest military joint ventures, a $90 million paging operation with a

Guangdong-based unit of the PLA. Because of curbs on foreign involvement in telecommunications, GTE has no operating control, no board members, and no right even to audit the books. That means it could be in a difficult position if ownership changes. "We don't know yet what our reaction is to this," says a company spokesman.

Beijing's stickiest task will be dealing with a handful of big PLA-linked conglomerates, including China Poly Group, China Carrie Enterprises, and China Xinxing Group. All run a grab-bag of businesses that include real estate, pharmaceuticals, transportation, and textiles. These groups will either combine peripheral businesses with other companies in the same field or spin them off as stand-alone operations. But they are expected to keep weapons businesses.

TIDY ROOMS. The military already has started moving out of nonstrategic commercial businesses such as Tontru Information Industry Group, based in Nanjing. Earlier this year, the $170 million company received a directive from the central government ordering it to shed its military ties. Tontru quickly sold the 19% stake previously held by the local military training school to other shareholders, including the Nanjing municipal and Jiangsu provincial governments, for a nominal amount. Former officers continue to hold executive positions but had to retire from the military.

The PLA isn't going to retreat to its barracks without a fight. It's a long way from the Zhongnanhai leadership compound to the freewheeling karaoke lounges in the South, where some PLA cadres like to do business. The decree apparently does not include civilian parts of the defense Establishment, such as China North Industries Corp., which has been implicated in several arms-smuggling cases in recent years. And parts of the PLA are likely to fight a rearguard action. "They're adept at getting around regulations," says Sinologist June Teufel Dreyer at the University of Miami. "The name of the operation will change, but the ownership will stay the same."

All that said, Jiang has chosen a good time to make his move. Fears that the slowing economy will lead to huge unemployment has the leadership rattled, and public disgust at the PLA is growing. Since Jiang's speech, the state-run media have been filled with denunciations and exposés of military commercial abuses. For now, the tide of battle is rapidly shifting against PLA Inc.

By Dexter Roberts in Beijing and Mark L. Clifford in Hong Kong, with Stan Crock in Washington

COMMENTARY

By Irene Kunii

OBUCHI JUST MAY SURPRISE JAPAN

Keizo Obuchi, new Liberal Democratic Party chief and incoming Japanese Prime Minister, is best known for a self-effacing personality and mediocre record. But former Prime Minister and LDP elder statesman Yasuhiro Nakasone, a onetime rival and still hardly an admirer of Obuchi, thinks the new leader has a chance of leading Japan out of its economic morass. Nakasone sees Obuchi, 61, as a "harmonizer" who can cut enough deals with party faction leaders to get critical policies through.

COMPROMISER

One of Obuchi's strengths is his ability to keep [illegible]

He has a point. The role of compromise-maker is highly regarded within the LDP. As the pol who controls the largest faction of LDP legislators and has avoided making enemies over a 35-year career, Obuchi has kept peace among LDP factions by ensuring fights don't become feuds. "We can't get along without Obuchi," says LDP Upper House legislator Ichita Yamamoto.

Obuchi also is close to the Buddhist-backed Komei party and Ichiro Ozawa's Japan Reform Party. After losing Upper House elections in mid-July, the LDP can't push legislation through that chamber without such opposition help. Most opposition leaders say they won't delay measures to revitalize the economy. But they want a general election before yearend, and Obuchi is determined to avoid one. To get his economic packages through the Diet, Obuchi will likely incorporate opposition proposals on financial reforms. He also is likely to take a less confrontational approach than ex-Prime Minister Ryutaro Hashimoto, who promised sweeping reforms but foundered amid waning LDP support.

LOAN MESS. Obuchi's "first priority is to "switch the economy from min to positive growth." His agenda includes a $70 billion stimulus plan, o top of the $115 billion program ear er this year. That means more publ works expenditures to keep two ke LDP constituencies—construction and re estate—afloat. Obu is also likely to intr duce permanent cu of $29 billion in per sonal income taxes and $14 billion in c porate taxes. His biggest challenge w be to fix Japan's ba loan mess by imple menting the LDP's "Total Plan" for re-pairing the financia sector. But no one knows whether the LDP will allow l banks to perish.

Obuchi also needs to regain the trust of the markets, which are poised to push the yen to 150 to th dollar, and the voters, who worry about jobs and future prosperity amid the worst recession in decade He has little time to do this, with the Diet in session for only 70 day beginning July 30. But Obuchi may be off to a good start: He persuade Kiichi Miyazawa, the former Prime Minister and Finance Minister who helped draft a $215 billion bank-bailout package earlier this year, to return to his Finance Ministry job.

If Obuchi can achieve an econom upturn in his first two months in o fice, his immediate troubles will be over and the LDP's future will be s cured for a while. The LDP gave Obuchi his job as much to save it from disaster as to rescue Japan.

Kunii covers Japanese politics and the economy in Tokyo.

.PAN

AKASONE: 'JAPAN AN MAKE A COMEBACK'

ıe former Prime Minister rates the new leadership

suhiro Nakasone, 80, who served as ime Minister from 1982-87, is widely edited with being Japan's strongest der in the past 25 years. On July 28, Liberal Democratic Party elder tesman talked politics with BUSINESS EEK *correspondent Irene M. Kunii in office in Nagatacho, Tokyo's Capitol ll.*

What can we expect of Keizo Obuchi Prime Minister?

A lot will depend on whether he can ow leadership. He needs to semble the best possible Cab- et appointees and be able to anage them skillfully. The an himself is quiet, mild-man- red, and uncomplicated. He s never exhibited strong lead- ship, and he has little to show the way of political accom- shments. Yet if he can man- e people well, he'll succeed.

Since Obuchi was able to rise to the sition of LDP *faction chief, is he good maneuvering and managing people?*

Obuchi may look soft on the surface, it he's tough on the inside. He has rseverance. In complicated situations, 's flexible and strives for harmony. iat's why he's good at making com- omises. He's brilliant when it comes to eating harmony, even where the op- sition is concerned. He'll need that skill in the Upper House, where we have to pass crucial legislation such as financial reform.

Q: *Obuchi has been denounced, particularly by the Western media, as ineffectual and the worst choice of a leader at a time like this. What do you think of such criticism?*
A: Some of the criticism is correct, and some of it is wrong. You have to consider the fact that Obuchi is the product of a consensus-driven society.

WHO IS OBUCHI? "[He] may look soft on the surface, but he's tough on the inside. He has perseverance . . . He's flexible"

Q: *There is criticism that Obuchi is choosing his aides according to their factional affiliation instead of according to their ability.*
A: It's fair criticism. Obuchi should take note of it and make amends. He needs to show the people that he's not going to be influenced by factional politics. The criticism is directed at both Obuchi and the LDP, so we need to reflect on it. It's crucial that we show the people that we regret what we've done and try to make amends.

Q: *Will your party succeed in passing its "total plan" to clear up the bad loan problem?*
A: We've drawn up a scheme and a blueprint. We'll clarify details of the bridge bank plan in legislation that will be drawn up in the weeks to come. The most difficult problem is to avoid cutting off funds to small businesses while reforming the problem banks. That's why we need bridge banks. If we turn the bad loans into losses, we'll run out of capital. The government will then have to raise money. We'll have to decide on the method of determining what is a bad loan. And when we dispose of the bad loan, we'll have to determine whether this could cause a cutoff in loans to healthy investors or create bankruptcies.

Q: *Will the government allow banks to go bankrupt?*
A: We'll have to let some banks go under or force them to merge. Bridge banks will take over the problem banks and decide what to do.

Q: *Many wonder whether Obuchi and the* LDP *will be able to go through with the task of closing down insolvent institutions.*
A: If Obuchi can't go through with it, his administration will fall.

Q: *Is there hope for the economy?*
A: Japan is in a slump, and in the high-tech sector we're behind. But I believe if we can revive the economy, Japan can make a comeback. Our fundamentals are not bad. Both the public and private sector are pumping funds into research and development. Even though the economy is in a slump, private companies continue to invest an average 3.5% of their revenue in R&D. That means spending hasn't been cut back and remains high by international standards. I'm hopeful.

Q: *Doesn't Japan need a two-party system?*
A: We need such a system in the distant future, but not now. The opposition is too fractured and will not be able to integrate soon. Eventually, there will be three competing groups—the LDP, the new Democratic Party of Japan, and possibly the Japan Communist Party.

Q: *Will there be a general election in the near future?*
A: It's up to the Prime Minister to decide. But the LDP wants to avoid an election at all costs. So we'll compromise with the opposition and try to adapt their proposals on financial reform in order to pass legislation.

BROTHERS GRIM IN BRUNEI

A sibling of the sultan vanishes–and so does $8 billion

It's a fairy tale from the Asian crisis. Once upon a time, a fabulously wealthy Sultan watched his neighbors fall on hard times. So the rich man gladly offered to help them by dipping into his vast wealth. But when the Sultan reached into his coffers, much of his gold was gone. To his horror, so was his brother, the prince.

That's the Brothers Grimm version of current events in Brunei, the tiny country nestled on the northern shore of Borneo. Thanks to the oil wealth of his kingdom, the Sultan of Brunei is a multibillionaire. But now one of his brothers, Prince Jefri, is suspected of absconding with billions of dollars from the treasury. The scandal runs the risk of destabilizing the local economy and wreaking more havoc on the already battered economies of Southeast Asia.

GUESSWORK. In 1994, Jefri set up Amedeo, a company dedicated to developing Brunei's infrastructure. Amedeo developed the country with a vengeance, building new hospitals, schools, cellular-phone networks, a polo field, beach bungalows, and more for the country's 300,000 people. Then, say diplomats, royal accountants found evidence that some Amedeo managers had siphoned off $8 billion. Jefri may also have pledged billions of dollars in bonds held by the Brunei Investment Agency (BIA), which has invested heavily offshore, as collateral to back his personal loans from foreign banks. Senior officials of the government, BIA, and Amedeo decline to comment. But diplomats and bankers say the Sultan now claims it is not Brunei's responsibility to pay the $10 billion that Amedeo owes to its suppliers and workers. Jefri, meanwhile, has vanished.

No one knows how much damage the Amedeo affair has caused. Brunei does not publish budget figures, so it's impossible to figure out where the Sultan's wealth ends and government reserves begin or even if Amedeo has state backing. "There aren't any fire walls between the personal finances of the royal family, the government, BIA, and Amedeo," says a diplomat. "[T]he feeling is that it's all in the same pot." Thus diplomats believe that [J]efri and Amedeo have blown a hole in [B]runei's national finances, which are already reeling the effects of a 30% drop in [o]il prices over the last year. The economy will not grow at all this year, as opposed to 4% in 1997.

That's bad news for the Sultan's neighbors. The Sultan plays badminton with Malaysian Prime Minister Mahathir Mohamad, and he had pledged $3 billion to back the recapitalization of Malaysia's battered financial system. Malaysian officials won't comment, but diplomats say the aid may not materialize.

ROYAL CUTBACKS. The Sultan also pledged to contribute to two International Monetary Fund bailouts worth $60 billion: He had promised $1.2 billion to Indonesia and $500 million to Thailand. Bank Indonesia officials have recently learned that Brunei has imposed new conditions on the aid: It can only be tapped as "the last line of defense" after Indonesia has depleted the rest of its $43 billion package. "Of course, we're not happy with these ridiculous terms," says a senior official of Bank Indonesia.

Singapore could also get drawn into the mess. The Brunei ringgit is pegged to the Singapore dollar, and rumors are mounting that currency raiders want to test the link. Singapore does not want to see the peg severed, since it is a valuable symbol of stability in the battered local markets. If the Brunei ringgit collapses, the effect on Singapore markets could be considerable.

To recover from the disaster, the Sultan has had to tighten his belt. He has closed the state-of-the-art Jerudong Amusement Park, which does not charge admission, for two days a week. He has slaughtered 40 polo ponies to cut stable costs. Diplomats say he hopes to raise funds with a king-size garage sale, starting with a Boeing 747 and two Airbus Industrie widebody planes in the royal fleet, and throwing in some of the Rolls-Royces. Next to go may be the Beverly Hills Hotel, the Dorchester in London, or even a newly acquired residence in Paris where Jefri is rumored to be hiding.

The Sultan also wants Jefri home again. Jefri's 21-year-old son Hakeem, who was also an Amedeo manager, is being held under house arrest to force Jefri back to Brunei to face a government inquiry. That probe may shed some light on the whereabouts of Brunei's billions, but the scandal has certainly ends the Brunei fairy tale.

By Michael S[t]
in Bandar Seri Bega[wan]

BETRAYED Instead of handing out promised aid to his flailing Asian neighbors, the Sultan may have to sell off his Rolls-Royces and planes

THE SULTAN: WITH OIL PRICES DOWN, BRUNEI WAS ALREADY HURTING

COMMENTARY

By Ian Katz

BRAZIL SHOULDN'T SQUANDER THIS WINDFALL

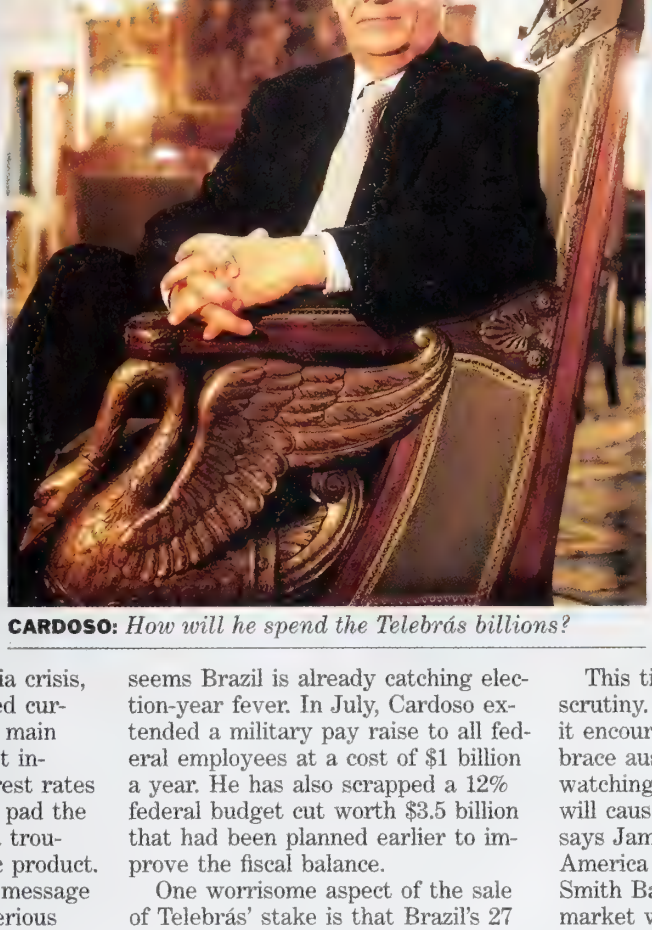
The $19 billion auction of phone company Telebrás on July 29 was celebrated by Brazil as a milestone in its economic opening. For good reason: Telebrás reaped 64% more than the $11.5 billion minimum price. The winning investors, including MCI Communications Corp. and Telefónica de España, will modernize the telecom system and give President Fernando Henrique Cardoso's government badly needed cash.

But it's too soon to samba. Cardoso must see to it that the Telebrás revenues, part of $25 billion in foreign direct investment that will enter Brazil this year, are not wasted. With just two months before October's presidential election, candidate Cardoso might want to raise government spending to pump life into Brazil's economy and win favor with voters. "The temptation is immense," says Walter Molano, Latin America economist for SBC Warburg Dillon Read. "Politicians have a very short time horizon."

What Cardoso must do is make sure every possible centavo goes to pay off Brazil's $283 billion total debt. In the wake of the Asia crisis, debt appears to have eclipsed current-accounts deficits as the main fear among emerging-market investors. In Brazil, 20% interest rates on its largely domestic debt pad the fiscal deficit, which has hit a troubling 6.7% of gross domestic product. Retiring debt would send a message to investors that Brazil is serious about getting its fiscal house in order. Paying off debt is politically feasible, too. Brazilians will deem the privatization a success as long as phone service improves.

Cardoso should see the wave of foreign investment and privatization revenue washing over Brazil this year as a one-time windfall to improve economic fundamentals. But it seems Brazil is already catching election-year fever. In July, Cardoso extended a military pay raise to all federal employees at a cost of $1 billion a year. He has also scrapped a 12% federal budget cut worth $3.5 billion that had been planned earlier to improve the fiscal balance.

One worrisome aspect of the sale of Telebrás' stake is that Brazil's 27 states will receive about 40% of the revenues, or $7.6 billion. The states must put some of the money toward retiring Brazil's debt, but they are free to use a large portion of it however they like. Controls over spending in many states are notoriously lax. Funds are easily shifted from one account to another and can disappear into black holes of corruption.



CARDOSO: *How will he spend the Telebrás billions?*

PAST MISTAKES. Brazil should recall the mistakes of other Latin nations. Just before Mexico's presidential election in 1994, the government allowed its current-accounts deficit to bulge dangerously, relying unwisely on volatile short-term investment to finance dollar-dominated debt. In Argentina, President Carlos Menem succumbed to temptation in 1994 as he prepared to run for reelection. Previously, Argentina used privatization money to help balance the budget. But as the election neared, Menem loosened the purse strings and fiscal accounts worsened. As a result, the economy was vulnerable when Mexico's devaluation crisis broke out. "Argentina definitely got complacent," says Martín Redrado, director of Fundación Capital, a Buenos Aires economic think tank.

This time, Brazil will be under scrutiny. That could be a blessing if it encourages the government to embrace austerity. "The market will be watching so closely that any slipup will cause investors to get nervous," says James W. Barrineau, Latin America strategist for Salomon Smith Barney in New York. "The market will send a quick signal that it doesn't like what's going on."

Selling Telebrás is a landmark for Brazil. It was a huge effort facing constant opposition. If Cardoso and Brazil's states can avoid the temptation to waste the Telebrás money, it will be an even finer accomplishment.

São Paulo bureau chief Katz covers Latin politics and economics.

Paying down debt would send investors a message that Brazil is serious about putting its fiscal house in order

EDITED BY CHRISTOPHER POWER

WHY INDIA'S RULING PARTY IS FLIRTING WITH DISASTER

In the Indian town of Ayodhya nothing remains of the mosque that Hindu fundamentalist mobs razed in 1992. A court order stopped extremists from building a temple there. But now, the Hindu nationalist Bharatiya Janata Party is running a coalition government, and BJP-affiliated groups are preparing materials needed for the temple. If it gets built, mobs may attack other mosques on disputed sites.

What's worrisome is the BJP's seeming inability—or unwillingness—to control events. Prime Minister A. B. Vajpayee won the March election by campaigning on a moderate, reform platform. Now, it is obvious that extreme elements inside the BJP are trying to isolate Vajpayee and impose their own agenda. This struggle is producing an ineffective economic policy and such dangerous acts as the nuclear tests in May and the bid to build a temple in Ayodhya.

VAJPAYEE: *Pushed by extremists*

ADVANI: *Pursuing his own agenda*

INVESTOR FLIGHT. To political analysts, the group to fear is the Rashtriya Swayamsewak Sangh (RSS), which started in the 1930s as a grass-roots Hindu organization. Today, RSS hard-liners favor extreme nationalism in economic matters, the formation of paramilitary groups, and rewriting history textbooks to glorify Hindu heroes. The group wants to set the tone for the whole regime. "I tell you," says Chandra Sekhar, a former Prime Minister and onetime admirer of Vajpayee, "the BJP is nothing but the wing of the RSS."

The dominant personality among the hard-liners is L. K. Advani, the home minister. It was Advani's associate Yashwant Sinha who managed to land the Finance Minister portfolio, outmaneuvering Vajpayee's candidate. Sinha then presented a budget that dealt a setback to earlier reforms. Opponents inside and outside the coalition have been picking apart his budget ever since, forcing Sinha to back down on such moves as new tariffs to protect textile makers. mess has dismayed investors, who have driven Indian st down 11.6% since the budget's unveiling in June. Nei Advani nor Vajpayee would speak with BUSINESS WEEK.

The BJP's foreign policy, too, is filled with contradicti Vajpayee authorized the nuclear tests partly to pacify h core elements of the RSS. Since the tests, though, he and followers have tried to mend fences with the U. S., Pakis and the rest of the world. But Advani and other hard-li continue to make bellicose statem about Pakistan and China, which helped keep tensions simmering tween India and its adversaries.

NO RETREAT. The next flash point is odhya. Vajpayee says he will abid the decision of the courts, which considering claims that the site of mosque belongs to Hindu groups. RSS extremists insist the courts rule in their favor. More alarming, hint that they will not accept an verse ruling. They say that no c can decide matters of religious s ment and that they will press ah with the temple.

BJP officials claim critics just don't understand their pa Says Mohan Guruswamy, a BJP adviser close to Advani: " is a nonmonolithic party with a spectrum of opinions, and onciliation of those opinions can only be done by debate." ers figure that Advani would like to unseat Vajpayee but not risk a backlash. Coalition partners also prefer to deal Vajpayee. Says Christophe Jaffralot, a French political entist and authority on the BJP: "Indians voted for Vajpa not the BJP." But as this rivalry plays out, the econom slowing and the reform movement is losing momentum. I political drama India can ill afford.

By Manjeet Kripalani in New L

GLOBAL WRAPUP

BLAIR'S POWER PLAY

▶ British Prime Minister Tony Blair is moving to curb the power of his top treasury official, Chancellor of the Exchequer Gordon Brown. On July 27, in his first cabinet reshuffle, Blair appointed his chief political fixer, Peter Mandelson, architect of last year's election win, as Trade Secretary. The idea is to check the ambitious Brown, who has used his control of the budget to rival Blair for publicity and influence. Having Mandelson in the Trade slot should be good news for business, which is worried by such government initiatives as minimum-wage legislation and pressure on companies to let unions organize.

A TELLING VOTE IN NORTH KOREA

▶ North Korea's first Supreme People's Assembly election in more than eight years looks like a major boost for Kim Jong Il, elder son of North Korean founder Kim Il Sung. The July 26 voting replaced 64% of the assembly's 687 members, bringing in Kim supporters while ousting members blamed for recent policy failures and the rise of the military elite. Ki also won an assembly seat, a move Seoul analysts say paves the way fo his assumption of the presidency, vacant since his father's death in Ju 1994. The younger Kim may assume the post around Sept. 9, the 50th anniversary of the country's foundi

The election may also say someth about the severity of North Korea's famine. Experts say the failure to in crease the size of the assembly for t first time in three decades suggests that the population has not risen. Th could reflect famine-related deaths.

EXECUTIVE SUITE

IALF A LOAF IT BLIMPIE

nflict at the sub chains has left investors with crumbs

hortly after dawn on St. Patrick's Day, 1,000 corned-beef sandwiches re trucked from mpie on Long Island the American Stock change in Lower nhattan, passing ens of Blimpie shops that were much ser. To the bleat of bagpipes, Chief ecutive Anthony P. Conza rang the ening bell to herald his switch from New York Stock Exchange. The ders devoured the subs, unaware of a ange truth: Conza was on the turf "the other" Blimpie.

Long before Blimpie became America's .2 submarine-sandwich chain, Conza i co-founder Peter DeCarlo sliced the npany in half. State by state, city by y, they divvied the nation in 1976 to resolve warring business philosophies. "It was like Monopoly," Conza says.

Starting with 50 stores each, they began a grueling race. "I said I could do it better, and he said he could do it better," DeCarlo explains. If size matters, Conza won: With 2,000 stores and $39 million in revenues, his publicly traded Blimpie International Inc. is about 10 times as big as DeCarlo's privately held Blimpie Associates.

But it's a hollow victory. Blimpie remains a bifurcated anomaly in a business that thrives on uniformity. Its divided status has throttled growth at the larger company and given it one of the more convoluted histories in the annals of Corporate America. And that's only the start of the problems caused by mishandling the Blimpie name. Investors in Blimpie International, too, have been left holding crumbs. Amid free-falling profits, they have questioned the multimillion-dollar payouts the company makes to its executives for rights to use the name overseas. The result: Shares have slid to around $3, down from $16 two years ago. "I've never heard of such a ludicrous arrangement in all my life," says Wendy Liebmann, a New York retail consultant.

Indeed, even as Conza tries to bail his chain out by expanding abroad and developing new restaurants featuring tacos and pasta, he is hampered by the other Blimpie's control of Manhattan—a showcase serving everyone from Wall Streeters to tourists. "It's like I've invited people over for dinner," Conza says, "and they arrive at somebody else's house and eat their cooking."

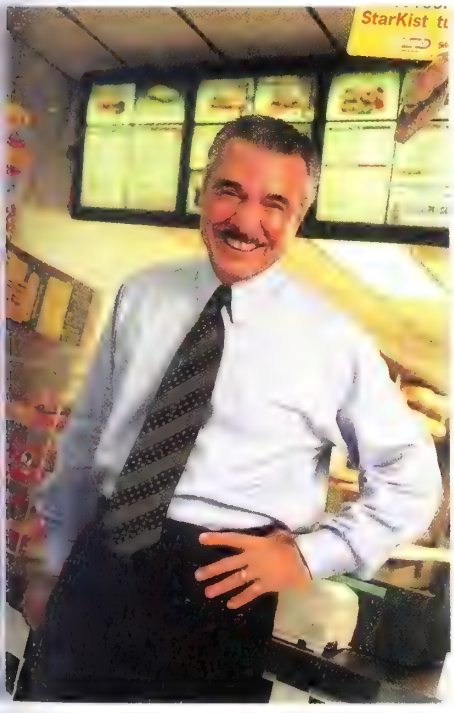
NO GREASY SPOON. For all the problems the name has caused, it was born innocently enough. In 1964, Conza and DeCarlo were 24—the best of friends, the most naive of businessmen. At a Halloween Party in Hoboken, N.J., Conza, DeCarlo, and a third friend talked about starting a business. The product: the sub sandwich they had tried on the Jersey Shore. Thinking the name "sub" sounded like a greasy spoon, they rifled through the dictionary and stopped at "blimp."

They borrowed $2,000 from a friend of DeCarlo's in the textile business. De-

BOTTOM: JOHN'S ABBOTT

VO RIVALS, ONE NAME

In 1976, Blimpie was sliced into two companies, each with its own turf



◀ BLIMPIE INTERNATIONAL

CEO Anthony P. Conza

REVENUES $39 million

RESTAURANTS 2,000 in U.S., other nations

AD SLOGAN "It's a Beautiful Thing"

STATUS Traded on the Amex

BLIMPIE ASSOCIATES ▶

CEO Peter DeCarlo

REVENUES $4 million

RESTAURANTS 250 in and around New York

AD SLOGAN "America's Best Dressed Sandwich"

STATUS Privately held

Carlo, with a perpetual smile and a crushing handshake, sweet-talked suppliers. Conza, the shy son of a New York Stock Exchange runner, quit his clerking job at E. F. Hutton to handle the books. "He was the pencil man with patience," says David Pierro, whose three stores in Manhattan and New Jersey overlap both Blimpies. "Peter was the limo guy with $1,000 suits and checks bouncing all over the place."

Customers flooded in. And within a year, Blimpie sold its first franchise. While Conza sought to control Blimpie's fate, DeCarlo pushed to open anywhere a franchisee was interested. DeCarlo won, and both say that unbridled expansion ate up all their cash, forcing them to sell the stores they owned. They cashed in their cars and life-insurance policies. Both recall the last straw: Approaching the bridge from New Jersey to Manhattan, neither could come up with the 50¢ toll. Soon after that, they sliced Blimpie in half. Conza took Chicago. DeCarlo grabbed parts of California, Maryland, and Virginia. On it went. "I woke up one day to a call saying, 'Three of your stores are under Peter. Three are under Tony,'" recalls New York franchisee Joe Martignano. "It was like my parents split up."

BICKER, BICKER. Both soon floundered, and DeCarlo gave Conza his rights outside the Northeast in exchange for a cut of profits in those regions. Conza took Blimpie International public in 1983 but pumped money into a Southwestern-style chain that almost pulled him under. In 1987, he began selling huge subfranchises. Since 1994, the strategy more than doubled sales.

But like divorced parents bickering over the kids, the two never stopped arguing. Conza has criticized the occasional sanitary violations of the New York stores. DeCarlo, who blames New York's aging real estate, demanded that Conza stop undercutting quality by selling prepackaged sandwiches at Southern gas stations. Conza ordered thousands of baseballs with the Blimpie logo for a promotion, but DeCarlo refused to buy any. Confusing customers further, they even have competing ad campaigns.

Amid the squabbling, archrival Subway closed in on Manhattan, forcing Conza and DeCarlo to unify. Conza's offer to buy the smaller Blimpie for $40 million—about 10 times sales—was rebuffed. "The money wasn't right," DeCarlo says. But he sent emissaries to Conza's test kitchen to nibble on turkey, ham, and beef. They agreed on standardizing cold cuts but still diverge on cheese and bread. Nor can they settle on a menu. "They didn't have the chicken fajita I eat at home," gripes a Florida tourist, leaving a New York store.

FORK OVER. The arrangement was tolerable until the mid-1990s, when Blimpie International ran out of territory in the U. S. With revenues limited to franchise fees and equipment sales, Conza looked overseas. But unlike most trademarks, which are registered to a corporation, "Blimpie" is owned by Conza, DeCarlo, and Chief Operating Officer David L. Siegel. Without control of the name, Blimpie couldn't raise money to go abroad.

> "When management is taking money out the backdoor... something's rotten"

To solve the problem in advance of a $10 million offering in 1995, the company agreed to pay DeCarlo, who refused to give up his rights, 30% of the international profits. Conza and Siegel were advised to fork over the name for free by Miami investment banker Steven N. Bronson. His firm, Barber & Bronson, a major Blimpie shareholder, sponsored the offering. But instead, the pair leased the name to Blimpie for 99 years. Last year, the chain paid them $4.5 million to use the name abroad—a good deal more than the $3.28 million it earned in profits. By 2002, they are to get $3 million more for its use. "They wanted to maximize their personal wealth," Bronson says. "We had a problem with it. But it was better than leaving ownership with management."

Conza and Siegel, who own 31% and 15% of the stock, respectively, insist the arrangement is fair. "We've compromised our salaries and benefits to build the company," Siegel says. "Why should we give away our rights?" But the deal is a big reason Wall Street soured on the stock. "When management is taking money out the backdoor so a company can use its own name, something's rotten in Denmark," says analyst Michael D. Smith of brokerage Fahnestock & Co.

Worse, despite the hefty payments, Blimpie has made little dent abroad: So far, Conza has opened just 37 stores overseas. And profits, which sank 19% for the fiscal year ended June, 1997, were off a further 20% for the first three quarters of fiscal 1998. Blimpie's problems may have started with its name—but they surely don't end there.

By I. Jeanne Dugan in New York

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LABOR

DIVIDED AT UNITED

A labor win pits union members against themselves

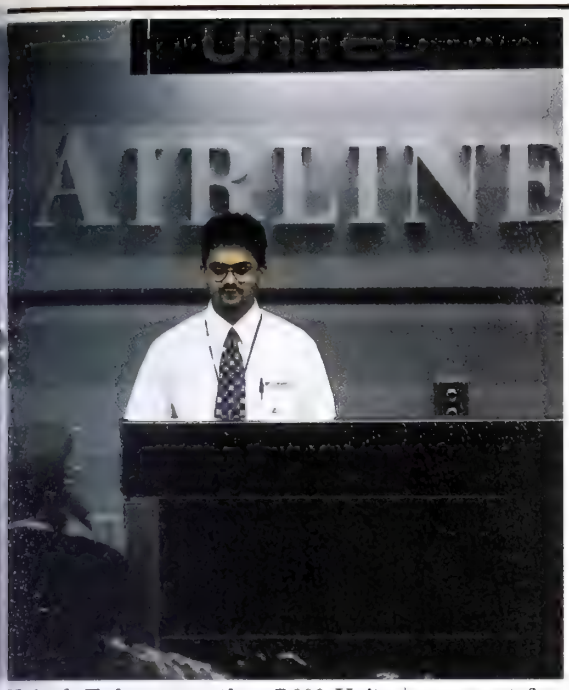
The International Association of Machinists and Aerospace Workers (IAM) scored labor's biggest organizing win in nearly two decades on July 17 when 18,000 ticket agents at UAL Corp.'s United Airlines Inc. voted to join the union. But the victory also has kicked off a series of internal battles between the IAM, the pilots' union, and the carrier, which is 55% owned by employees.

The immediate problem: The IAM wants huge pay gains of 20% to 30% for their new members. But the IAM's 26,000 mechanics at United might resent a big pay hike for their new colleagues out of fear that less would be left for their own wage gains.

The IAM's organizing win also has triggered maneuvering over whether to renew United's Employee Stock Ownership Plan (ESOP) when it expires in mid-2000. The leaders of the IAM and the Air Line Pilots Assn. (ALPA) want to keep employee ownership going. But to do so, they must find a way to buy new shares, even though employees are reluctant to make new concessions (table, page 50). And because the current ESOP is based on how much each employee earns, the IAM's drive to lift agents' pay can't be separated from the subject of ESOP 2, as it's sometimes called. UAL CEO Gerald Greenwald also hopes the ESOP will continue: "I do think ESOP a good idea," he says.

Agents voted for the IAM largely cause they felt shortchanged by ESOP. During the 1994 ESOP talks, U ed's then-Chief Executive Officer St en M. Wolf agreed to pay all ne hired agents $6.65 to $9 an hour, v top scale of $18.06 for pre-ESOP ag

Nothing validates a consistent principle more t



INFIGHTING

Ticket agents want pay gains–which threatens mechanics' aims and could one day imperil employee control of UAL

United. Today, more than 7,000 Unit- agents earn the lower wage. Greenwald agrees that agents' pay uld be increased, by up to 30% for ne. With low unemployment lifting for similar jobs, United has been hit agent turnover of nearly 50% a year ong agents hired since 1994. How- r, it isn't clear how easy raising their pay will be. The reason: Agent wage levels were part of the concessions employees gave to set up the ESOP. So lifting them could be considered a change to the ESOP. "It's very difficult to change the terms of the ESOP" until it expires, UAL President and Chief Operating Officer John A. Edwardson said during a July 22 talk with reporters, referring to a new pact for agents.

Mechanics' resentment over the sacrifices they had to make to join the ESOP adds fuel to the fire. With tight labor markets driving up the pay of skilled mechanics nationwide, they're looking for big wage gains when the ESOP expires. Now that agents are in the same union, some mechanics worry that United will insist on lumping both groups together in bargaining and be less willing to give a lot to mechanics. A rump group called the Aircraft Mechanics Fraternal Assn. recently began trying to form a breakaway union of mechanics at United by making this argument.

The issue is all the more tangled because it's difficult to separate it from ESOP 2. Labor has several reasons to renew the ESOP. As employees retire, they can cash out their shares, which over time lowers employees' 55% stake. Since 1994, the ESOP's share has gone down by less than 2 percentage points. But unless employees buy new shares, it will sink faster and eventually hit 20%, when labor loses governance powers.

CONTROL ISSUE. Greenwald and labor leaders also want to allow employees to cash out some of their shares before they retire. United's stock has almost quadrupled since the ESOP, leaving a $17-an-hour IAM member with more than $70,000 in an ESOP retirement account. But many want to take some home before another industry slump undercuts the price. "Our members have money invested and can't get their hands on it. They're frustrated," says William L. Scheri, vice-president of the IAM transportation unit.

The unions want to bring new hires

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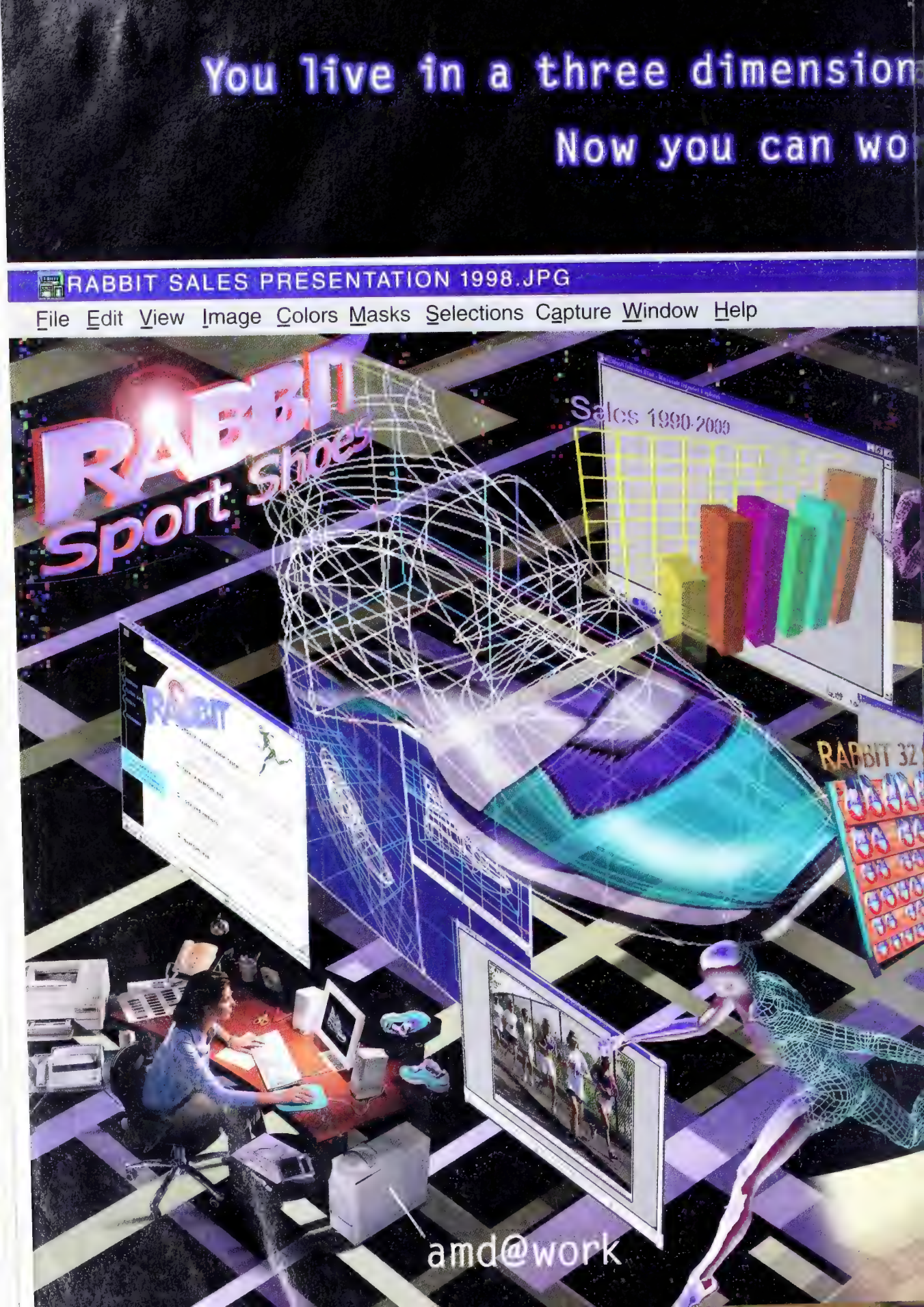
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into the ESOP, too. Since 1994, emplo have received shares based on w they join United. They do so bec they're working at the lower pay sc created to fund the ESOP. Essenti they're taking the same concession pre-1994 employees, proportionat the time they've worked. Howeve 2000, all union wage rates will s back to their pre-ESOP levels. And the ESOP shares will have been dis uted to employees. So anyone hire ter then won't get United stock. don't want some pilots to be ow and others to be non-owners," says spokesman Madison Walton.

The central problem is how to new shares. Although many emplo have enjoyed handsome stock ga

UNITED'S ESOP DILEMMA

- In 1994, employees paid $4.9 billion in concessions to buy 55% of the carrier through an Employ Stock Ownership Plan.
- The ESOP concessions end by July, 2000.
- To renew the ESOP, United's unions must buy stock—to main-tain their majority share, to inclu new hires in the ESOP, and to ca out employees who want to sell shares. But employees are reluc-tant to make more concessions.

they are not willing to grant and round of wage and benefit cuts. H ever, they also don't want to give up extraordinary control that comes majority ownership. For example 1995 Greenwald killed merger talks USAirways Inc. after employees they didn't like the idea. And to Scheri says he plans to block any p for Edwardson to become CEO a Greenwald retires at the end of the tion plan. The reason: Scheri ar that United's management didn't re neutral during the IAM's drive to re agents. "People just don't like wardson]," says Scheri.

Both the IAM and ALPA are ex ing ways to retain such power wit new concessions. ALPA has hired Morgan & Co. and Eugene J. K the independent Wall Street banker engineered the current ESOP for th lots, to look into the question. But so many conflicting demands, this be a challenge that even Wall Str best minds can't solve.

By Aaron Bernstein in Washin and David Leonhardt in Chicago

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Can CEO Ollila keep the cellular superstar flying high?

NOKIA

Behind his gentlemanly demeanor, Jorma Ollila, CEO of Nokia Corp., is a man of extremes. As his wife, Liisa Annikki, tells it, her husband fires up the Finnish sauna a good 15 degrees warmer than she likes it, all the way to 212F—hot enough to boil a pot of tea. It was a week after Easter when the Ollilas drove north from Helsinki for their first trip this year to the family's lakeside cabin. Ice was still floating on Lake Pukala, and the kids challenged their father to dive in. Emerging from the sauna, Ollila paused, then plunged naked into the icy lake.

Ollila, a 47-year-old former banker, lives by the plunge. He believes people get comfy and complacent and that it takes a dive into the unknown, or a push, to tap into their strongest instincts—those that guide survival. Six years ago, as an untested CEO, he bet the 133-year-old Finnish conglomerate on cellular phones, challenging rivals Motorola Inc. and L. M. Ericsson. In the struggle that ensued, Ollila's Finns outdid themselves. Fast and focused, with a canny eye for design, Nokia wrested market share from entrenched competitors and emerged as the most profitable player in the industry.

GOOD NEWS. Sales in Nokia's twin engines—the mobile phones and base stations that make up the bulk of its revenues—more than quadrupled, from $2.1 billion in 1993 to $8.7 billion last year. And the good news keeps pouring in, with operating earnings for the recent June quarter surging to $616 million, up 76% from the same quarter in 1997. These days, the $9.8 billion Nokia has one of the hottest cell phones on the market—the 6100 series—whose battery and unique circuitry support a whole week of standby time (page 60). It's the first supersmall phone with that kind of battery life. And Nokia is the first company to develop a mobile phone that surfs the Web.

All told, Nokia is providing troubled Motorola Inc., the leader in old-fashioned analog phones, with a humiliating tutorial on digital communications (page 62). Motoro-

JORMA OLLILA
Nokia's CEO doesn't hesitate to plunge in—be it an icy lake or new markets

:EO Christopher B. Galvin glumly concedes that "the ana- business is trending down." Ollila, for his part, predicts t Nokia will be "No. 1 in the world in the number of nes sold, in growth, and return on capital employed."

The company's startling climb has provided the Continent h something it was sorely lacking: a new high-tech su- star. What's more, that triumph is in a crucial technology— bile communications. That's the next frontier for the In- net, and one of the few areas where Europe is racing ead of the U. S.

LANCHE. Smack in the middle of Nokia's success stands la, whose name is accented on the "O." He's a self-avowed techie who hasn't even put plumbing in his lakeside cab- But it's Ollila who is improvising a brand-new style of h-tech management. Refuting the common "slip-and-you- " thinking, Ollila sticks with slip and you grow.

In a sense, this model is a variation on the man's freezing plunge at the lake. Ollila views disasters as education, and he fires almost no one. While others rush to the world's high-tech hot spots, Ollila created one of his own in an underpopulated stretch between Russia and the Arctic Circle. From there, he nurtures a network of suppliers around the globe. And just when Nokia seems to be performing in top gear, as it is now, Ollila risks disarray by switching the jobs of all his top managers. He even muses that if he could, he'd switch his own job.

That's mere idle thought, though, as Ollila and Nokia face an avalanche of work. To keep the company's sales and earnings growing at 25% to 30%, he must push the company to churn out new models of phones at a dizzying rate. He must fight off a welter of cell-phone rivals while coping with market gyra-

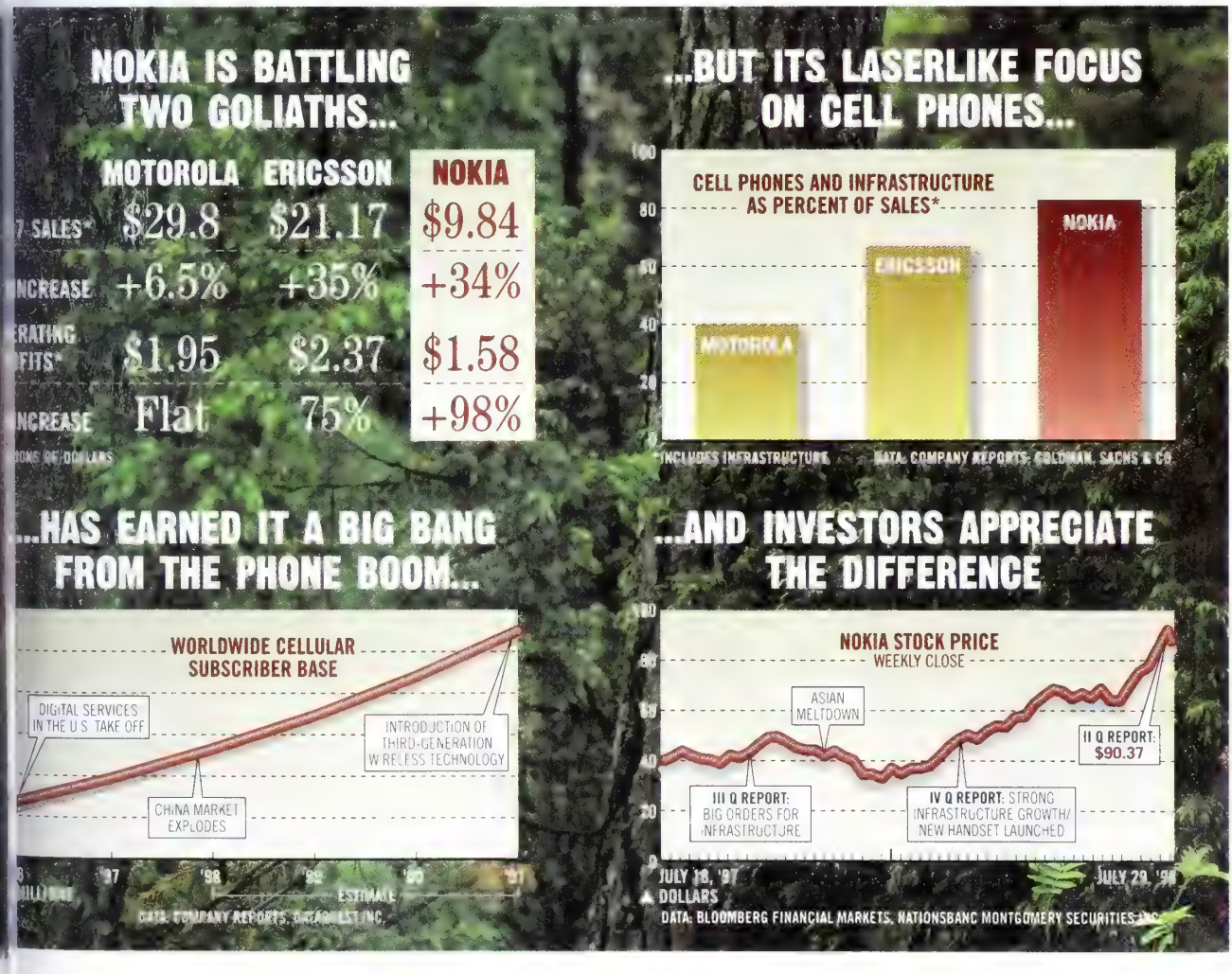


ILLUSTRATION BY ALBERTO MENARO

Cover Story

STAFFERS HEADING HOME

Ollila believes Nokia draws strength from the understated collegiality of its culture, which he associates wit the Finnish character–and which he intends to preserve. "We don't snap our suspenders," he says

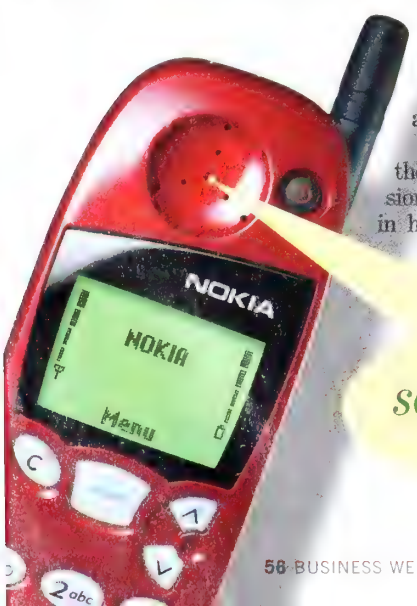
tions in Asia. And he must deal with shortages bred by too much success. The 6100 phones are so popular that AT&T—Nokia's most important U.S. customer—can't satisfy all of its subscribers. But AT&T CEO C. Michael Armstrong doesn't seem worried. "I met personally with the CEO of Nokia," he says. "They have what they call a two-month recovery plan."

NEW DAWN. While fighting the handset wars, Ollila must also contend with heavy hitters such as Alcatel Alsthom and Northern Telecom Ltd., which compete against Nokia in cellular base stations, or so-called infrastructure. Looking beyond the consumer cellular market, Nokia and its rivals foresee an enormous business market developing in which many of the data networks that connect the world's PCs will go wireless. That's one reason big infrastructure players are spending billions to swallow data-networking companies, and Ollila may be forced to join the fray. As if all that weren't enough, Ollila already is turning his phones into tiny computers and Web surfers, which is bumping him up against some of America's high-tech bruisers in Silicon Valley and Redmond, Wash.

Far from fretting about the future, though, Ollila passionately embraces it. Sitting in his summer cottage a few months after his spring plunge, the lake shimmering be him, Ollila describes a breathtaking new dawn in the wire world. Imagine all of the information in the world, he says the voices, pictures, movies, music, news, every item on the ternet—all of this available through a wallet-size device.

This future isn't so far away. Ollila believes it will beg Japan in about three years, when the country finishes la infrastructure for a new wireless technology wave. Eu and the U.S. should come a year or two later. Techies c the Third Generation, the first two being analog and di cellular. The new generation will be marked by dramati creases in bandwidth. Wireless phones will send informa at up to two megabits per second. That's 40 times fa than today's computer modems—fast enough for telecon encing on a mobile phone. Researchers at Nokia, as well a competitors, already have most of this technology in ha

For the winners in this market, the growth prospects potential rewards seem boundless. Eventually, radio c bility will be built into all manner of household appliar That will let consumers set their VCRs from the road an able machines to notify their manufacturers of parts ures. Conventional cell phones will shrink in size and p eventually becoming embedded in watches or earrings, N executives predict. At that point, cell phones may well number the population in rich countries. Much of the ph less developing world, meanwhile, will leapfrog the t



Nokia is preparing for the day, not so far away, when many of the data networks that connect the world's PCs go wireless

ıal poles and wires and move straight to cellular. Rapid growth should about double the worldwide number cellular subscribers, now equally divided among Europe, a, and the Americas, to 550 million by 2001, according to nservative estimate from Dataquest Inc. This benefits the three—Motorola, Ericsson, and, of course, Nokia—which three-quarters of the cellular market with nearly equal res. Motorola, though, is struggling to escape from dying log, where prices are collapsing. And Ericsson, while ful- stride with Nokia in digital sets, is far larger and more erse and is burdened with less profitable old-line busi- ses. When Ericsson de- ed 24% earnings gains on 27, the market compared

to Nokia's far greater sec- -quarter growth and drove stock down 13%.

'or now, it's the Finnish ıpany that is seducing in- tors. Of the three con- lers, Nokia has the highest rating margins—about 18% he second quarter—and is most focused on the boom- cellular market. The stock, ch is traded in Helsinki, ckholm, London, and New k, already is up 130% this year. "They are executing almost flessly," says Mark McKechnie of Nationsbank Montgomery urities.

But the challenges the company faces are formidable. First, ne prices are likely to head down—way down—a trend that kely to spook cell-phone stocks. Even Nokia executives say in a few years, knockoffs of its whizzy 6100 phones, which for as much as $500 now, will likely be sold at Wal-Mart res for $19.95. To keep fetching top dollar for its phones, dia must keep developing the zippiest features. Indeed, it's pressure that's pushing Ollila toward Internet phones.

IVERGENCE. Ollila's strategy fits right into the much- yhooed digital convergence—the joining of telephones, computers, even kitchen appliances, into brainy do-it-all traptions. Of all these devices, the computer-with-cell- ne is a natural. Ollila will push this vision aggressively in U.S.—the biggest market today. But he's also spreading gospel in China—the world's fastest-growing market and dia's largest—as well as in Net-obsessed Japan.

Trouble is, Nokia isn't the only one searching for a digital Dorado in the form of convergence. While Ollila's sharp nimble Finns ambushed Ericsson and Motorola in the phone market, they're now converging right into a Silicon ley traffic jam. To sell pocket-size Net devices, Ollila must neuver his way among the brightest stars of America's h-tech economy, where everyone from Microsoft Corp. to m Corp. wants to own a piece of the same business.

And few of them are convinced that this next revolution is ıg to be conducted through mobile telephones. Who's to say, after all, that mobile Web surfers won't use palmtop computers equipped with telephone chips? And there's always the chance the public will shrug at the entire selection of these tiny devices. "You have to think hard," says Richard Howard, director of the wireless research lab at Lucent Technologies Inc.'s Bell Labs. "Do you really need full-motion video in a car phone?"

So despite his laid-back manner, Ollila has no time to catch his breath. He must prepare Nokia for a metamorphosis. Like a snake growing out of its skin, the company has to emerge sleek and strong in the next generation, when simple handsets are stocking stuffers and mobile phones molt into powerful new be-alls.

Ollila's tried-and-true motivator is the plunge. In the past, there have been plenty of crises around which to rally the team. Ollila recalls them with great fondness. But now, Nokia has become synonymous with success, with giddy growth and a soaring stock. It even has its name on America's Nokia Sugar Bowl.

So how does Ollila conjure up a sense of fear and urgency? For starters, on July 1, he reached into Nokia's sparkling glass-and-steel headquarters on the shore of the Baltic, took the inner circle of four fortysomething Finns who run the company's main divisions, and switched all their jobs. His infrastructure executive, Matti Alahuhta, was rotated from his customer-schmoozing position into the marketing vortex of handsets. Asia-Pacific chief Sari Baldauf was told to head up infrastructure, as well as development on the Third Generation. Handset chief Pekka Ala-Pietila, who oversaw the spectacular development of the 6100s, became vice-chairman, charged with exploring new ventures. Later this year, Ollila will bring back his chief executive for U.S. operations, Olli-Pekka Kallasvuo, to be chief financial officer. In short, except for Ollila, every top person at the company is getting ready for a brand-new job—all in the name of "removing people from their comfort areas," as Ollila puts it.

Despite the upheaval, Ollila is determined to preserve a

FROM PAPER MILLS TO CYBERSPACE

1865 Engineer Fredrik Idestam founds a paper mill that later becomes Nokia.

1922 Nokia neighbor Finnish Rubber Works, maker of galoshes and tires, merges with power- and phone-cable maker Finnish Cable Works.

1967 Nokia and the combined Finnish Rubber & Cable Works merge to form Nokia Group. Company invests heavily in electronics.

1992 Jorma Ollila takes the reins and focuses Nokia on telecom. Boosts GSM phone production.

1994 Nokia lists on the New York Stock Exchange.

1996 Nokia sells off cable and color-TV businesses and grows in cellular.

1998 Share price doubles over the first six months, and second-quarter net income soars 66%. Nokia expands rapidly in China.

SPREADING THE GOSPEL

In China, the world's fastest-growing market and Nokia's biggest, bus ads promote its next-generation cachet

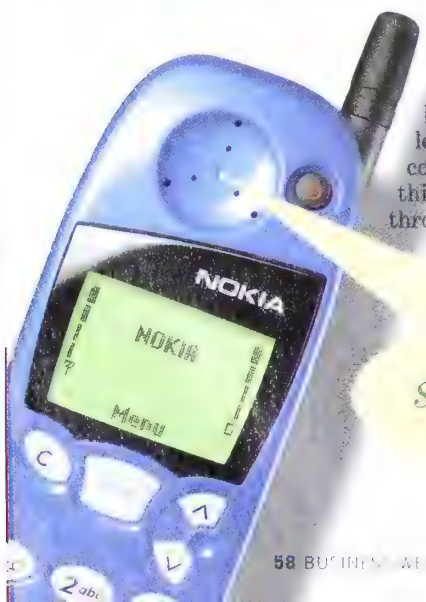
PEKKA ALA-PIETILA

The handset chief who oversaw development of the 6100 is now vice-chairman in charge of new ventures

corporate culture in Helsinki dominated by Finns. He jokes about this, explaining that the best brains in Silicon Valley, London, or Hong Kong recoil from moving to icy Helsinki, where it's dark all winter. The trick is to give his new recruits autonomy and let them pursue their careers in Nokia's big markets, where taxes are far lower and the lakes thaw by Easter. But Ollila also believes that Nokia draws strength from its understated collegiality, which he associates with the Finnish character. "We don't snap our suspenders," he says in his fluent British English.

The culture Ollila struggles to preserve goes back a ways. Founded in 1865 in a mill town 100 miles north of Helsinki, Nokia has made just about everything at one time or another. Many Finns still associate the name with the rubber snow boots they wore as children (table, page 57). A hundred years later, Nokia had grown into a regional conglomerate.

GOOD TIMING. In the mid-'80s, the company made perhaps its best acquisition, landing a local hotshot from Citibank named Jorma Ollila. The son of an electrical engineer in Seinajoki in Western Finland, Ollila was chosen at age 17 for a scholarship at Atlantic College in Wales. After returning to Helsinki for a political science degree, he went to the London School of Economics and then joined the British headquarters of Citibank. At 34, the young father of three children moved to Nokia. He started out in finance but was determined to learn about industry. One colleague recalls the tall, thin financier circulating through the nearly deserted



'REMOVING PEOPLE FROM THEIR COMFORT AREAS'

On July 1, Ollila gave the inner circle of fortysomething Finns who run Nokia's chief divisions new jobs to position them for the first leg of the next century

SARI BALDAUF

The former top Asia-Pacific exec will head up development of Nokia's Third Generation product

headquarters on a Saturday, introducing himself to the people there, in his low-key way, as "the cashier."

In 1988, as Nokia was getting steamrolled by Japanese American titans, management underwent a generational drawing Ollila and a group of other thirtysomethings into sitions of power. Ollila, then 38, got his first taste of indu heading the tiny cellular-phone division.

What he learned fired up his engines. Europe was hea toward a digital standard for mobile phones. This would vide European manufacturers with a vast unified home ket. If Nokia could concentrate its resources on mobile munications, it could seize a leadership role.

Ollila got a chance to test this plan in 1992 when board abruptly named the 41-year-old CEO. He claim wasn't hungry for the job, or even ready for it. But he h vision of Nokia that inspired his colleagues. In short orde pumped up research in Helsinki and Tampere, 100 mil

Mastery in phones doesn't guarantee success in pocket-size Net devices, where Nokia will have to contend with palmtop PCs

TTI ALAHUHTA

e ex-infrastructure honcho has been given global
ponsibility for handsets

north, and even in distant Oulu, near the Arctic Circle. tightened bonds with key suppliers, building up the U.S. dquarters in Fort Worth, Tex., near chip supplier Texas truments Inc. At the same time, he unloaded pieces of the conglomerate, selling off computers, cables, and TVs.

NTLE CORRECTION. Ollila's timing was perfect. As the dig- phone standard called GSM took off in Europe, Nokia s ready with easy-to-use cell phones, all equipped with the demark TV-shaped screen. The company engineered its nes so that the same models, with small variations, could adapted to the varying frequencies and standards around world. Motorola, meanwhile, concentrating on the splin- ed U.S. market, was still pumping research into analog hnology. That left Europe and the growing digital markets Asia largely to the two Scandinavians, Nokia and Ericsson. Right on cue, mobile-phone growth exploded. Ollila quick- expanded capacity by enlisting parts suppliers across Eu- e, while barging into China and Mexico. Then, in late 5, Nokia hit a speed bump. The stock plummeted by half, l calls for executive firings echoed from Wall Street to lsinki. But Ollila resisted the pressure. He and his col- gues chopped up responsibility for inventory, logistics, l design, and divvied them up by region. After a few nths, they had the company back on track. Ollila now ws the crisis as a precious lesson, vindicating his vision of ntle Finnish management. "In that situation, a typical erican company would have fired 12 people," he says.

Sitting in his simple summer cottage, a tennis book on the fee table and his wife, Liisa, up the hill hoeing the garden, ila sometimes contemplates retirement. But he has little e to indulge such fantasies. Nokia is riding high on a t of new handsets, including the 6100, the centerpiece of an T nationwide campaign. To all other cell-phone players and nnabes, that makes Nokia the company to beat. Soon, h Motorola and Ericsson will come out with racy new ducts of their own. Ericsson is preparing a multiband orld phone" that should extend roaming across oceans. d analysts expect Motorola's new digital phones to grab k some share in the U.S. market.

Such competition could erode some of Nokia's recent gains. t the company thinks it can outrun rivals by doing what ke Inc. accomplishes with its sneakers. Ollila hopes to n one product into dozens of niche offerings, each one targeted to different moods, occasions, and age groups. Already Nokia pumps out new models every 35 days.

The testing ground for this approach is Japan—home of the world's most gadget-happy consumers—where Nokia launches many of its niche systems. New ones include a tiny $950 steel-encased phone that has the look and feel of the ever-popular Zippo lighter. That one targets executives. For the fast-growing market of teenage girls, there are chameleon phones: By changing a panel, you match the phone's color to your clothes or fingernails. And for the techno crowd, Nokia will soon release the second version of its $995 Communicator, a

OLLI-PEKKA KALLASVUO

Later this year, Nokia's No. 1 executive in the U.S. will return to Helsinki to become chief financial officer

phone that folds open into a tiny Web-surfing computer. It's still painfully slow, with cellular data transmission stuck at 9,600 baud. But Ollila is hoping that the Communicator's fleeter, more powerful offspring will carry Nokia into the Third Generation.

To win in this uncharted territory, Nokia and its competitors will require more than fabulous cyberphones. They'll need to offer customers network knowhow in their base stations. These are the transmission stations, costing from $75,000 to $300,000, that account for 35% of Nokia's sales. Operating companies buy them by the hundreds and scatter them through their coverage areas. For customers to extend their data networks into mobile telephones, as the industry expects, all the players are going to have to pack these stations with network smarts.

To pick up this expertise, Nokia last December bought Ipsilon, a Silicon Valley systems company, for $120 million. But since then, its rivals have been buying far bigger outfits. In June, Alcatel Alsthom snapped up DSC Communications Corp. for $4.4 billion. Weeks later, Nortel nabbed Bay Networks Inc. in a $9.1 billion deal. Analysts think Nokia may shop for a big systems company of its own. But it is still toying with developing the expertise in-house, according to Ala-Pietila.

While Nokia, Ericsson, and Motorola are all preparing to battle one another with Internet phones and intelligent base stations, they've been forced to join forces on the Third Gen-

eration. Their worst nightmare: All the new features arrive on schedule—on palmtop computers instead of cell phones. To avoid that scenario, in June the three companies formed a London joint venture with British computer maker Psion PLC. The deal establishes a common software platform—Psion's operating system—for the coming generation of mobile Net devices.

Cover Story

In linking up with tiny Psion, Ollila and his competitors jilted none other than William H. Gates III. Earlier in the year, the Microsoft chairman toured Europe, plugging Microsoft's Windows CE software for Third Generation machines. He lost out. His software, phonemakers complained, wrenched from the PC and not created for next-gener machines. Gates's loss, though, means that cellular ph could eventually be battling a slew of Microsoft-pow handheld devices in the same mobile market.

Ollila claims not to be worried. "The market will b enough for all of us," he says. But don't misread the He's plenty competitive: He can recite the exact ages two sons when they finally beat him in tennis. When it c time to plunge, Ollila is extreme—a man of fire and leading Nokia into cyberspace.

By Stephen Baker in Helsinki, with Roger O. Crocke Chicago and Neil Gross in New York

'THE BEST WIRELESS PHONE ON THE MARKET'

In the spring of 1996, a tense team of Nokia Corp. researchers gathered in Salo, an industrial suburb of Helsinki. Their charter: to create a new "icon" among cell phones—something jazzy, like the Apple Computer Inc.'s first Macintosh. The marketing division presented a wish list of grueling specs: feathery weight, long battery life, and whizzy new features to attract techies. Then came the clincher: It was to be unveiled in Beijing in November, 1997—just 20 months away. "We knew that time was our enemy," says program manager Arto Kiema.

What they came up with is Nokia's 6100 series—powerful, 4.5-ounce phones about the size and shape of a slim pack of cigarettes. The phones debuted on schedule in China—a major growth market for cell phones. Since then, consumers from Sydney to Seville have snapped up an estimated 3 million units. The phones are now featured in AT&T's nationwide U. S. promotion, helping Nokia steal market share from leaders Motorola Inc. and L. M. Ericsson.

The saga of the 6100 sets new standards for conquering high-tech markets. Developers began with a simple precept: First, to save money and time, they recycled everything from complex decoding software to ring menus from earlier, 2100-series phones. For panache, they added new features. But they confined the innovations to things that wouldn't tax the battery, such as simple computer games, an alarm clock, and an infrared modem for downloading E-mail from data networks.

Most important, Nokia listened to key customers. The Finns went straight to big service providers, such as AT&T, which buys thousands of cell phones and resells them in subscription packages. Such providers want their customers to be able to communicate across frequency bands used by different formats, such as analog and digital cellular and PCS. They also want phones switched on for as many hours as possible to maximize the number of calls received.

BREAKTHROUGH

Research at Nokia's Finnish labs slashed power consumption in tiny phones–which won over AT&T

Since lithium-ion cell-phone batteries are the standard, Nokia concentrated on ratcheting down power consumption in the handset. For help, it enlisted Texas Instruments Inc. The Dallas-based chip giant came up with proprietary power-saving circuits that brought Nokia's handsets from six volts—the standard for digital phones—down to three. Nokia then scrambled to redesign other components to run on less power.

The most arduous job Nokia face was customizing the phone for ever major market. Developers built in rudimentary voice-recognition for Asia, where keyboards are problem atic, and raised the ring volume so the phone could be heard on crowde Asian streets. A bigger challenge was building in extra receivers so the regional models could handle all th different formats: GSM dig tal in Europe and much o Asia and one analog and two digital modes for the splintered U. S. market. "To work through all the protocols was painful," sa Kiema. "Sometimes they' in conflict."

WINDOW. As the phone be gan to take shape in the summer of 1997, AT&T was looking for a new model t anchor its nationwide pro gram. It was Nokia's gold en opportunity—and point of peak anxiety. Rivals were ready with their phones; Nokia was not. The Finns showed AT&T a test version of the zippy new model, whose batteries manage a full week of standby time, and pe suaded AT&T to wait. Three months into the rollout, Nokia's only proble was ramping up production quickly enough at its Fort Worth plant. "This is the best wireless phone on the market, bar none," gushes Dani Hesse, CEO of AT&T Wireless.

Now, Nokia's team in Salo is trying to squeeze more phone into eve smaller packages. With the right partners and a fire in the belly, it's only a matter of time.

By Stephen Baker in Helsin

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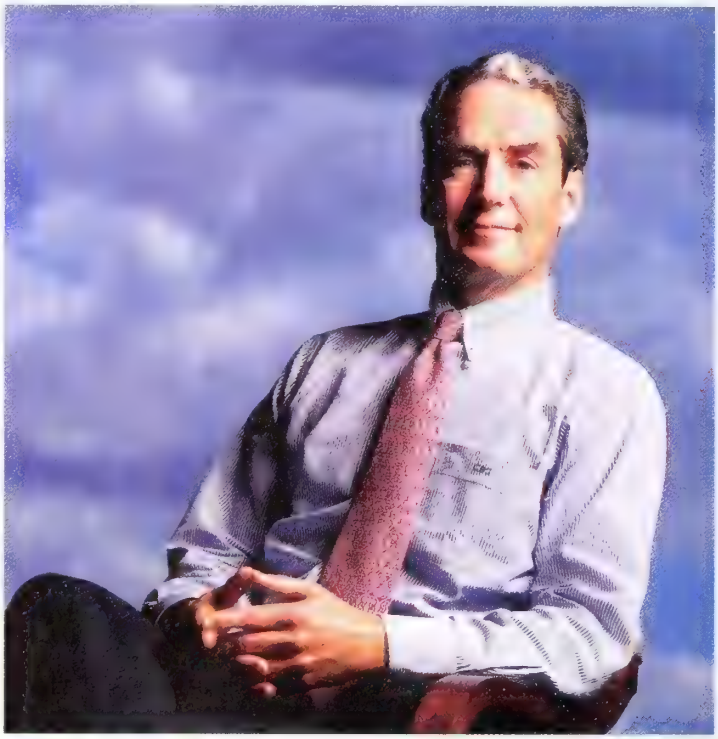
COMMENTARY

By Roger O. Crockett

MOTOROLA: SLOW AND STEADY ISN'T WINNING ANY RACES

In moments of uncertainty, Motorola Chief Executive Christopher B. Galvin often seeks counsel from members of his board, including his father and former CEO, Robert W. Galvin. The senior Galvin is always ready with this advice: Regardless of how difficult things appear to be, the issues are solvable if you stick to the fundamentals.

If only the fundamentals would stand still. With each passing quarter, it seems, Motorola finds it harder to muster the velocity that today's digital markets demand. And now, Galvin's turnaround plan seems cautious and out of step compared with the bold and swift gestures of his rivals. Although he expects the company to return to profitability by the fourth quarter, Galvin insists: "It will take some time, a year or two, to work our way through all the issues."



"NO ORTHODOXY"

CEO Galvin says Motorola isn't bound by "the old way." Yet investors are wary: The stock is off 40% in the past year

PLATITUDES. Trouble is, Galvin needs results today. In cell phones, the company is losing share to competitors Nokia Corp. and L. M. Ericsson. It's seriously late with the next generation of phones. And the chip picture is even gloomier. Galvin thinks he can stanch losses in his floundering semiconductor unit by farming production out to contractors. But to do that, he'll have to quickly sign some contracts. Says Don Warkentin, CEO of Motorola customer Aerial Communications Inc.: "Others do tend to move faster than they do."

Since assuming the top post in January, 1997, the 48-year-old Galvin has made several moves that look right—on paper (table, page 64). He has announced cost-cutting goals and a companywide restructuring. He has consummated some high-powered partnerships and promised to speed up product development.

But, for all that, Galvin remains vague and offers little more than platitudes on the key issue: Can Motorola get its execution act together? "The majority of the company is executing very well," he maintains. "A lot of people say, 'Why don't you have this one version of a phone?' That doesn't mean the rest of the company isn't executing superbly."

If it is executing superbly, the evidence isn't visible. Instead, the company's performance has been erratic, which has tried Wall Street's patience. Motorola's stock has cratered 40% during the past year and now hovers at $51 per share. "Management credibility has become an issue," says Susan Flischel, chief investment officer for the equities division of Countrywide Investments Inc., an institutional investor holding about 25,000 shares. "There's a question as to whether they can turn things around."

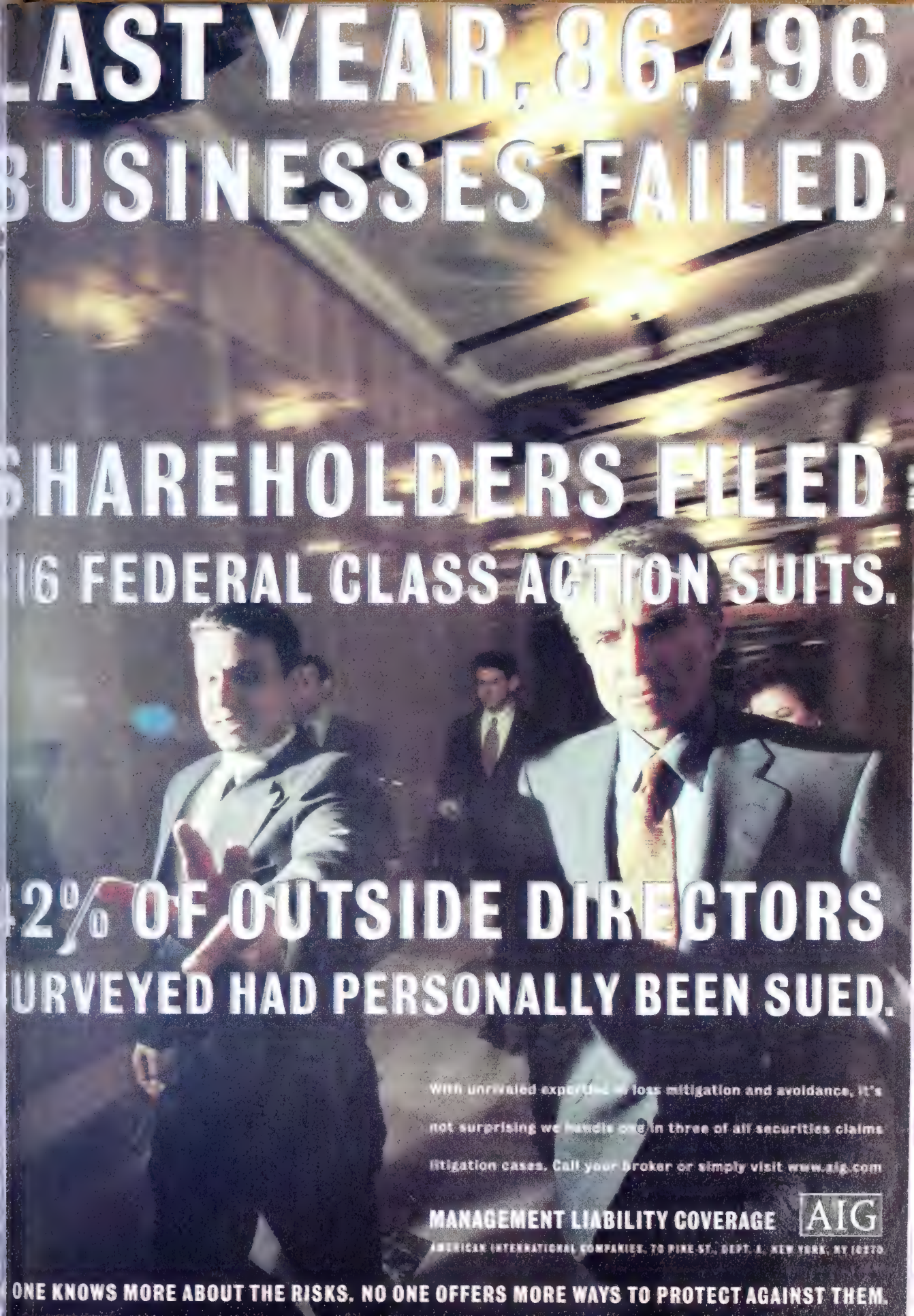
Motorola remains fa behind on the digital curve with rivals beating it to the punch. On July 21, for example, the company unveiled an impressive lineup o cell phones. Yet the most popular models—phones that handle bot analog calls and digital calls at two radio frequencies—won't be ready by Christmas, when 40% of all cell phones are sold. "That late—big-time late," says Jane Zweig, senio vice-president for wire less telecom consultant Herschel Shosteck Associates Ltd.

Galvin admits to missing the move to digital phones in the U. S. He says the recent reorganization of the company's commun cations businesses will help it get new phones out faster. "We've brought the entire com munications business t gether so we can reprioritize the investment to make sure it goes on those propositions the marketplace says are most important. We believe that will solve the problem."

WIRELESS LINKS. But Motorola has bigger problem still. It seems to be making the same mistake it made when it introduced its hot StarTAC i January, 1996: pricing the new phones so high they'll never reach the masses. Motorola's new slim V-series phone will retail for $500 o less, according to Merle L. Gilmore, president of Motorola's newly consol dated communications enterprise. The average selling price for digital phones in the U. S. is $150 to $200, Zweig says. "Is there enough value in this cute, new little phone?" Zwe wonders.

Motorola's idea of value is expect ed to emerge from the company's re cent acquisition of Starfish Software Silicon Valley specialists in linking data between mobile devices and computers. Thanks to Starfish, Motorola says, phones released within

Cover Story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the next 18 months will store addresses, telephone numbers, and other data, just like 3Com Corp.'s Palm organizer. And the software makes it possible to update a list on your phone and have it automatically update similar lists in your office or home PC—all over a wireless channel.

But if the future is in software, does Motorola need to be in the business of making cellular handsets? Currently, Motorola's slice of key U.S. cellular markets, such as TDMA and CDMA, languishes near single digits—well below the double-digit shares of Nokia and Qualcomm Inc. And the market is about to get a lot tougher as nimble competitors such as Samsung Electronics Co. rush in.

Indeed, Motorola may have fallen so far behind rivals offering whizzier features that manufacturing cellular-phone handsets could be a commodity game that the company can't win. A solution: focus on designing handsets and cutting-edge chips that power smart phones, but let others build the handsets. The company already does some outsourcing in Korea, where Pantech Co. builds a Motorola phone. Extending that strategy would cut costs and speed up the delivery of new products. Says Bob Egan, director for wireless research at consultant Gartner Group Inc.: "They need to get the heck out of spending lots of development money on handsets." Galvin isn't ruling out such a possibility, but no change is imminent.

FLAT CHIPS. Motorola also needs a strategy to build a more competitive cellular-infrastructure business. For years, the company has been hampered by not having its own switch, the big computer that directs cellular calls. Worse, future wireless networks will be based on fast routers that converge data with voice traffic, a narrowing but still big gap in Motorola's portfolio. Yet Galvin has let rivals beat him in the race to acquire this kind of networking expertise.

Nortel Northern Telecom Ltd. recently bought Bay Networks, a company that specializes in high-capacity routers. Motorola has yet to make a similar move. The furthest Galvin has gone is to discuss alliances with networking powerhouses Cisco Systems Inc. and 3Com.

The area in the mo urgent need of repair : the semiconductor div sion. Beset by soft de mand and pricing pre sure in Asia, the company's chip busine has flattened, slipping from $8.5 billion in sa in 1995 to $8 billion i 1997. But Galvin hasn been quick to trim fat Despite a semiconduc reorganization, Motor still has one of the broadest chip portfoli in the business with about 40,000 different chips. The goal is to r duce that by 50% wit the next 18 months.

Still, Galvin needs do more to beat Luce Technologies Inc. and IBM, both of which ar running profitable microprocessor segment even in an industry downturn. The outsourcing solution applies here, too. Motorola could design its chips but let other manufacturers build them By farming out production of noncore chips, the company could slash semiconductor capital expenditures and depreciation expenses, both no more than $1 billion and the highe of any Motorola sector.

Galvin says he continues to eval ate which of Motorola's older plant to shutter. Over time, he says, the company will blend in-house produ tion with outsourcing. "When you' in renewal, like we are," he says, "there should be no orthodoxy tha holds you to the old way." Marketplace to Galvin: The new way nee to arrive fast.

Crockett covers Motor from Chica

BusinessWeek ONLINE

See Galvin interview at www.businessweek.com.

GALVIN'S FIX-IT PLAN FOR MOTOROLA

NEW PRODUCTS AND MARKETS A new lineup of digital phones and pagers due out this fall and winter will give Motorola a chance to gain lost ground in key wireless markets, especially in the U.S. The company also is betting on controversial investments in emerging industries, such as satellite communications and cable modems.

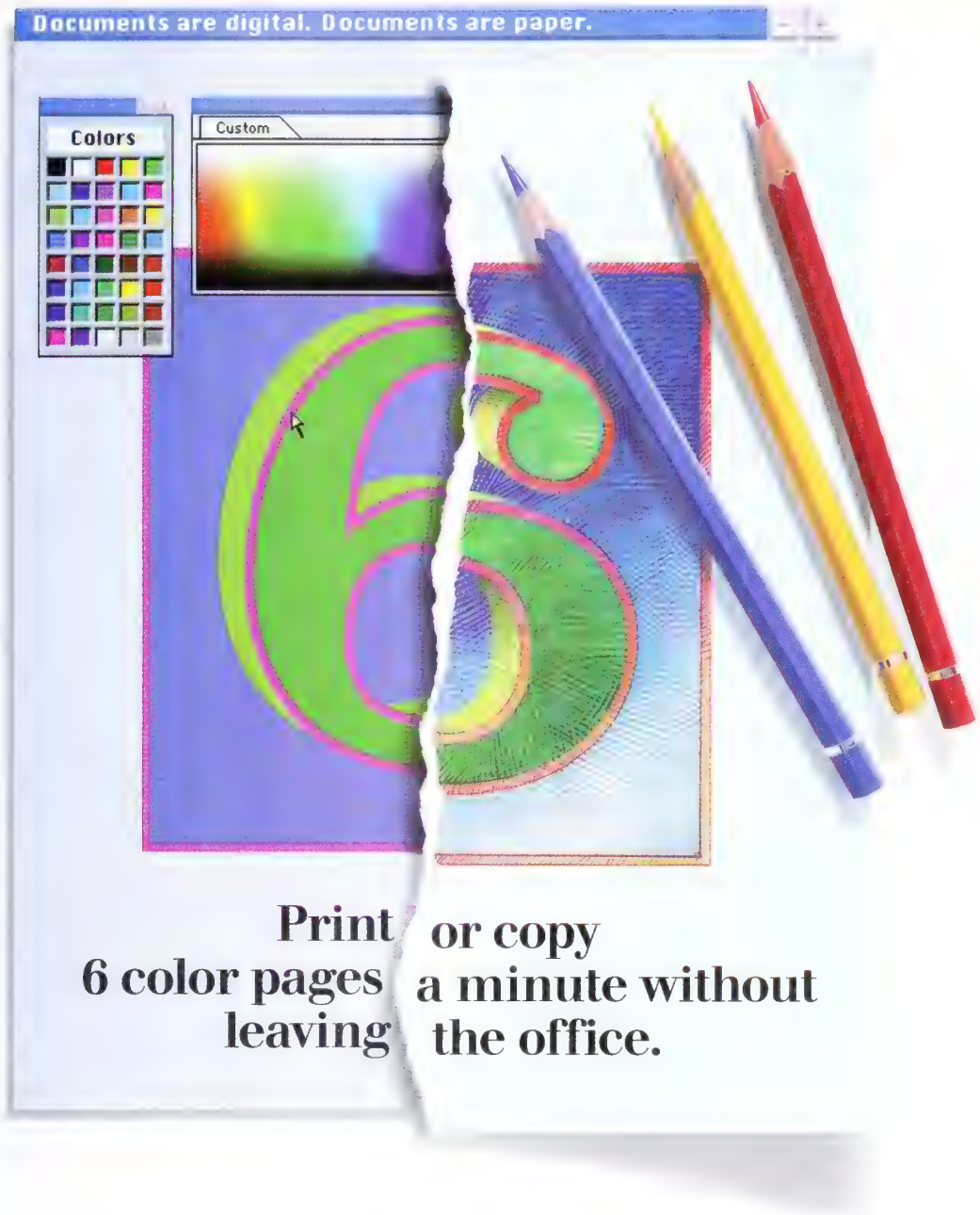
REORGANIZATION By consolidating autonomous communications divisions, such as cellular phones and two-way radios, under one umbrella, Motorola hopes to better share resources and respond more quickly to customers. The semiconductor business is undergoing a similar streamlining.

COST CUTTING Plans to slash annual manufacturing costs by 4%, or $750 million, and lay off 15,000 workers—including plant closings in the semiconductor and paging operations overseas—are expected to boost profits by mid-1999.

ACQUISITIONS AND PARTNERSHIPS Long committed to developing technology internally, Motorola is now willing to partner with rivals and acquire companies with superior technological expertise. Its recent purchase of Starfish Software, which develops wireless software, was the 11th key alliance consummated since January.

DATA: BUSINESS WEEK

Handsets? Forget making them. Motorola should farm out production and focus on high-margin software



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MARKETS

THE 21st CENTURY STOCK MARKET

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Amid the clutter of multicolored paper slips and the din of traders, tens of billions of dollars' worth of shares noisily change hands in a typical day at the New York Stock Exchange. A veritable army of 6,000 floor brokers, specialists, computer technicians, and miscellaneous clerks is required to keep the vast trading floor running smoothly.

Away from the exchange floor, however, a revolution in trading securities is under way that directly challenges the Big Board and other exchanges. A flurry of new trading mechanisms is about to transform today's largely antiquated exchanges into 21st century cybermarkets—floorless, global, and highly automated. The process is taking shape with a burst of activity that is surprising even the most jaded experts. Says Robert M. Greber, chairman of the Pacific Exchange: "The changes of the past few months are so dramatic as to be unbelievable."

Perhaps most notable is OptiMark, devised by market veteran William A. Lupien and defense industry consultant John T. Rickard. It's backed by several well-heeled investors, including Goldman, Sachs & Co., other major investment banks, and Dow Jones & Co., which owns 15%. The system features a supercomputer that conducts highly sophisticated courtships between buyers and sellers in cyberspace, arranging matches in nanoseconds, without layers of floor middlemen. It will begin trading NYSE stocks in October on the Pacific Exchange and next year on the screen-based NASDAQ stock market, which predominantly trades high-tech issues.

OptiMark's imminent unveiling is only a small part of the whirlwind of activity. The last few months have seen a spate of mergers and alliances, with many exchanges either shutting down floors in favor of faster and cheaper screen-based systems or considering such a move. A sampler:

- NASDAQ is planning to put its network on the Internet.
- Chicago's futures exchanges are debating when, not if, to close their venerable trading pits.
- MATIF, the Paris futures exchange, shuttered its pits eight weeks after introducing screen-based trading.
- London's futures exchange agreed to put some contracts online after losing one of its biggest to Germany's electronic exchange.
- Cantor Fitzgerald & Co. is seeking approval to trade U.S. Treasury bond futures online.
- The American Stock Exchange's acquisition in June by the National Association of Securities Dealers set off other combinations, including the merger of Pacific Exchange and the Chicago Board Options Exchange, which is now exploring screen-based options trading.
- The NYSE is considering linking with exchanges in Canada and Latin America and has opened talks with the Paris Bourse. NASDAQ's parent is having similar talks with Frankfurt and London.
- The Securities & Exchange Commission, in a reversal, has proposed that alternative trading systems operate with minimal oversight. "Now, our

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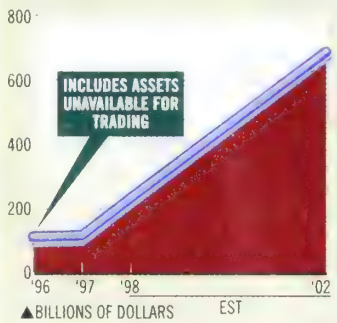

DATA: FORRESTER RESEARCH

...AND EXCHANGE SEAT PRICES ARE PLUNGING

- New York Stock Exchange seats are now valued at $1.35 million, down 32% from a record high $2 million in February.
- Chicago Board of Trade seats are valued at $410,000, down 52% from $857,000 record high in 1997.
- Chicago Mercantile Exchange seats are valued at $330,000, down 64% from $925,000 record high in 1994.

DATA: EXCHANGE REPORTS

Green light: SEC Chairman Levitt says that "now our basic philosophy is to get out of the way"

>sophy is to get out of the way, e still providing investor protec-" says Chairman Arthur Levitt Jr. s cybermarkets emerge, they could profound effects on every Ameri- with assets in the stock market, y publicly traded company, every rities industry employee, and count- investors. Electronic trading will transform overseas markets. The ges they bring will be both dis- ive and liberating.

lthough the future is far from clear tricky questions of global regulation investor protection remain to be d, the outlines of the 21st century's rities markets are becoming evi- . Exchange floors will be little more than showy frontispieces. Exchanges won't be run for the benefit of a membership cartel because there will be no seats. Instead, they will be run like a business and may even be publicly traded. With the advent of electronic trading systems, there will be more choice among trading methods. Exchanges will be integrated globally through high-speed data lines and satellite uplinks. Many markets will simply migrate to the Internet. "One has to question whether we need exchanges in their current form," says former SEC commissioner Steven M. H. Wallman. "Why maintain a floor for what is essentially an electronic business?"

Most large companies will list their shares globally and trade round the clock. The cost of raising capital could decline as the Internet makes it easier to distribute shares of initial public offerings and as more investors pile into the market. For investors, the risk of default will be reduced by instantaneous settlement of trades instead of the current three days. In a few years, it will be as easy and cheap to buy IBM from Budapest as it is from New York.

Already, the NASD is looking to move NASDAQ into cyberspace despite inadequate security and huge problems with the Internet's limits on capacity. "I have no doubt that investors will trade NASDAQ stocks over the Internet in a few years," declares NASD President Richard G. Ketchum.

The NYSE is also investing in new technologies, but they will be grafted onto a process that involves lots of real people. "Our customers want a broker and not a mailbox to receive their order and see that it gets executed," says NYSE Chairman Richard A. Grasso. Still, he warns his members that "the real challenge is to define their relevance in a world of technology."

CONTROL FREAKS. Why the rapid-fire changes, and why now? A big factor is the Internet, which has attracted droves of novice investors and created an entirely new industry of online brokers. In 1996, there were only 1.5 million online brokerage accounts. That number is expected to explode to 5.3 million by the end of 1998. Such accounts are now responsible for 25% of all retail trades. By 2002, there will be 14.4 million online accounts, with $688 billion in assets, reckons Forrester Research Inc. analyst Michael Gazala.

Already, 74 Internet brokers offer quick trades, real-time quotes, access to research, and even portions of IPOs—at rock-bottom prices. But investors are clamoring for access to markets beyond national borders and more control over their orders. They don't just want to place their orders through an electronic broker, they want to access markets online. "It gives me more confidence when I can place an order and see it reflected immediately in NASDAQ's [buy and sell] quotes," says Timothy E. Brog, a New York-based small-business consultant.

The NASD recently gave its blessing to market makers who want to provide pension and mutual funds with direct access to NASDAQ. Market makers are professional traders who put their own capital behind their buy and sell quotes on the NASDAQ system. Retail investors can already do the same through Datek Online, whose Island trading system lets investors place orders directly into the

NASDAQ system. "Millions of people will be negotiating the price of securities, and not just a few powerful NASDAQ market-makers or New York specialists," says Jeffrey A. Citron, the 27-year-old chairman of Datek Online Holdings Corp. (Datek Online has disassociated itself from Datek Securities, some of whose founders are under SEC investigation.)

As cybermarkets evolve, Wall Street firms will have to make big adjustments. Some jobs will be lost, especially among floor brokers. Full-service brokers who work out of branch offices will have to shift their revenue base from transactions to advice. "Brokers must learn to add value by giving their customers more personalized advice and relying less on transaction fees," says SEC Chairman Levitt. "The firms that don't recognize that are going to be out of business."

HARD TRUTH. Some investment banks will distribute underwriting deals such as IPOs through online auctions, which will make distribution faster and cheaper—but may also entice new rivals to offer lower fees to issuing companies. "The changes that will hit us over the next 10 years will be profound," says John W. Bachmann, managing partner of St. Louis-based Edward Jones, whose 4,200 investment advisers cater to the retail market. "The Internet will reveal that lots of what we think are value-added services are really commodities."

Cybermarkets also could have implications for major financial centers, since their economies could be at risk if securities firms stop concentrating in big cities where current markets are located. "With the globalization of markets and the trend toward electronic trading, traders and investors can move their trades anyplace in the world," says Brooksley Born, chairwoman of the Commodity Futures Trading Commission. "Their location in a financial center becomes less significant." NASDAQ's data center operates out of an unprepossessing building in a Trumbull (Conn.) business park.

The online onslaught already is driving down the value of exchange seats (chart). Seat prices in New York have plummeted 32%, from a record high $2 million in February to $1.35 million, while a CBOT seat's value has plunged 52% from a year ago. Online brokers' commissions also have been cut to shreds, averaging under $16 a trade, down from almost $53 in 1996.

Large securities firms aren't yet fully embracing the Internet. Instead, they are gingerly testing the waters. "They're being conservative out of fear they'll cannibalize their existing brokers," says Piper Jaffray Inc. analyst Stephen Franco.

With more than 14,000 brokers working out of 701 branch offices, Merrill Lynch & Co. isn't shy about moving its services online, but only clients who invest at least $100,000 can get a to it. This fall, they will be able to trading orders directly to the NYSE or the NASDAQ network, commis free. But Merrill will not compete discount brokers, insists Vice-Chai John L. "Launny" Steffens. "Execu may be commoditized, but advice never be," he says.

HUMAN TOUCH. The market renaiss puts the NYSE's Grasso in a de position. Although the NYSE is biggest exchange, it's in danger o coming the most costly. Neither G nor his members are technoph They've spent $1 billion since 19 speed up delivery of orders to the But they insist that only humans perform the complex alchemy inv in matching buyers and sellers.

And Grasso's open-mindedness goes so far. He refuses to let Opti use an existing network, the Inter ket Trading System, to gain acce the NYSE's order flow. ITS is a data work created by Congress in 19 connect the NYSE to the seven U.S. exchanges. If OptiMark's o

THE CYBERMARKET ERA

Exchanges are consolidating worldwide. The National Association of Securities Dealers, parent of the NASDAQ Stock Market, kicks off the trend in June, me ing with the American Stock Exchange. Amex acquires the Philadelphia Stock Exchange. NASD enters discussions with Germany's Deutsche Börse, which is planning a pan-European alliance with the London Stock Exchange.

Floors are shutting down and screens are moving in. NASDAQ explores putt its network on the Internet and begins automating Amex's auction floor. The P cific Exchange plans to close two stock-trading floors. Screen-based alternative markets gain ground. OptiMark's trading system, the most sophisticated yet, is begin trading NYSE stocks in October. MATIF, the Paris futures exchange, clos its pits eight weeks after introducing screens.

Regulators are encouraging cybermarkets. The Securities & Exchange Comm sion sets off a trading revolution with 1997 order-handling rules requiring dealers to display customer orders on the NASDAQ screen. The SEC propos letting Britain's Tradepoint Financial Networks place its terminals, which tie directly to London Stock Exchange, in the U.S.

Investors are going online in droves. The new electronic brokerage industry projected to have 5.3 million customer accounts by end of year. sets available for transactions i online accounts: $233 billion. Online brokers are moving upstream by converting Web sites financial-services portals. Some fer customers direct access to exchanges.

DATA BUSINESS WEEK

NASDAQ plans to move its network to the Internet

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Soon, it'll be as easy to buy IBM in Budapest as New Yor

can't interact with the NYSE's, it may never attract enough investors to get its system up and running. As Grasso sees it, OptiMark shouldn't be able to piggyback off his exchange's business.

OptiMark's Lupien figures Grasso has to resist because of the makeup of the NYSE's membership: Of 1,428 members, 479 are floor specialists and 365 are independent floor brokers. "Our system threatens more than half the voting membership," says Lupien. "It's no wonder they're fighting."

Unable to resolve their dispute, the warring parties have tossed the ball to the SEC, which is seeking industry comment on why it shouldn't let OptiMark get the access it wants. Most industry observers believe Grasso is less concerned about OptiMark than the precedent it would set. If OptiMark is allowed to use ITS, other alternative trading systems might pile through the door. Datek's Citron admits he would be among them. "Dick Grasso has lined up his tanks against us," he says with a scornful laugh. "And he should."

The online revolution will create winners and losers, but most experts believe retail investors will be among the winners. Gregor S. Bailar, NASD's chief information officer, envisions a day—perhaps just a few years away—when retail investors will use personalized stock markets to help manage their portfolios. Using advanced software, investors will seek out the securities that they want for their portfolios as well as the exchange that offers the cheapest execution and the investor's preferred trading method, Bailar says. It might be an online auction for shareholders who want to trade directly with each other, or it might be NASDAQ's dealer market or a link to the Euromarket. NASDAQ plans to offer them all. "We'll become an Internet portal site, offering a market of markets," says Bailar.

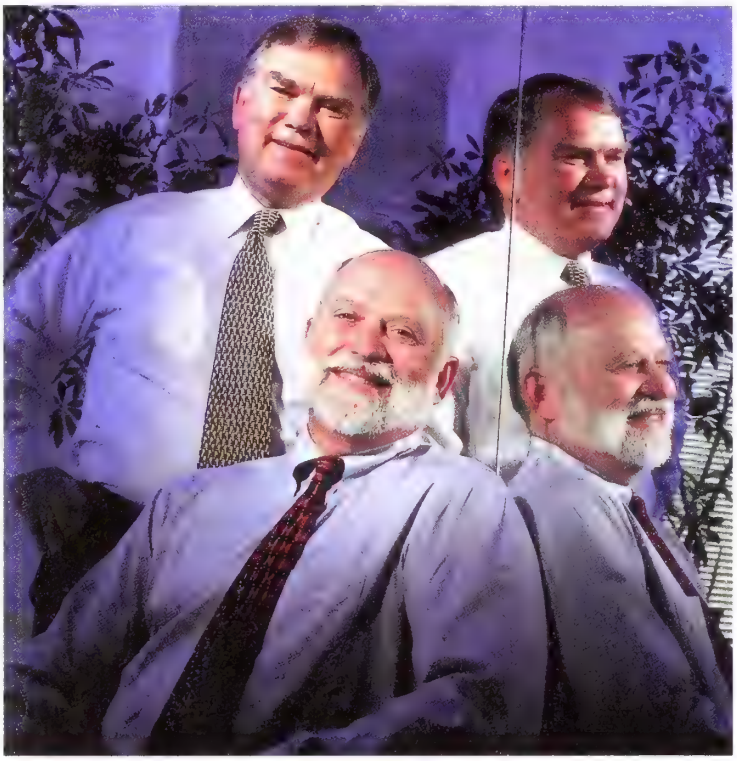
While retail investors will have more control over their orders, institutional investors will continue to drive the markets. And new trading systems such as OptiMark could make their jobs a lot easier, says Peter Jenkins, who most weeks handles 8 million shares as head of global trading for fund manager Scudder Kemper Investments Inc. OptiMark's supercomputer lets a portfolio manager who wishes to sell 500,000 shares of General Electric Co., for example, put in an order to sell at the market price of $150, but indicate a willingness to shave off a quarter-point, to $149¾, if the whole lot could be unloaded at once. Likewise, the system would find a buyer who wants GE shares, but not at the market price. Because of its ability to tease out trades that otherwise would remain hidden—and to do so anonymously—Jenkins expects volume to skyrocket.

Currently, large institutional traders play a cat-and-mouse game with orders. They can't afford to show a large order or the market will move against them. But nor can they afford to wait too long to pounce or they won't get the shares their portfolio managers need at the prices they want. If the cost of delays and missed trades can be reduced, says Jenkins, the cost of trading will drop and investor returns will improve. "This is really very exciting," says Jen "There's nothing else like it out the

But some view the cyber-market olution more with trepidation tha citement. At the Paris futures change, Marché à Terme Internati de France (MATIF), officials bega experiment with screen-based tra last April with the thought that, af year or so, the ma would decide whe screens or open ou were superior. Within weeks, the market p electronic trading—now some 100 MATIF ployees and 600 floor kers are out of a "They want us to t electronically, [but] not the same profess says Eric Boutigny, of MATIF's top tra "This way of life is f ing. I have to look other work." All rec generous severance ages for up to two y salary and an addit 18 months' unemploy allowance. "We did t the French way," s MATIF official. "Wh happens to Chicago, will be a massacre."

"OMENS." That possi was not lost on Chicago futures mar with their 10,000 tra and 140,000 addit workers. The Ch Board of Trade, for example, is fi cally preparing its electronic exch in the face of new competition broker Cantor Fitzgerald, whi seeking CFTC approval to trade Treasury bond futures online. "W not going to be like Julius Caesa ignore the omens," declares CBOT Patrick H. Arbor. "We will defen market share." Indeed, the CBOT's on July 28 voted to allow electr trading alongside open outcry, sta Sept. 28. First, though, the CBOT convince its members, many of w oppose letting screens in. The Born declines to indicate whethe will grant permission to Canto says there is nothing in her age mandate that allows her to stop technologies to protect jobs.

What Arbor and other LaSalle mavens fear most is that while



PIONEERS: *OptiMark's Lupien and Rickard devised a computerized system that matches buyers and sellers in nanoseconds*

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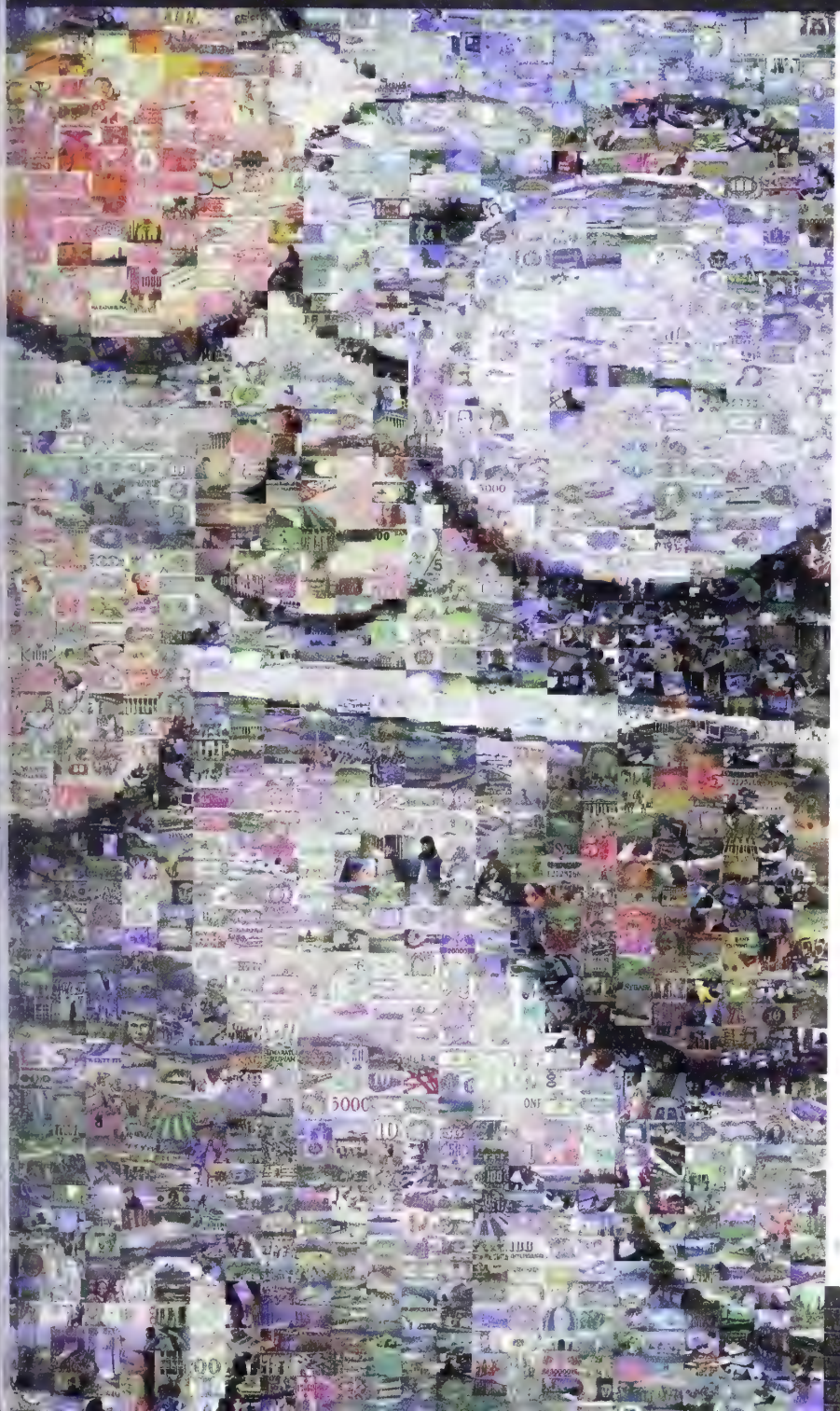

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The bull market may be hiding potential flaws

are concentrating on beating their local competitors, Europe's exchanges are plotting an invasion. Germany's Deutsche Börse now has 17 member firms with terminals on U.S. traders' desks. Deutsche Börse and others are doing limited trading in German government bond futures and are seeking regulatory permission to expand the program. That could siphon away significant market share. Europe's equity exchanges are also a threat to American ones. They have leapfrogged the NYSE and NASDAQ, according to Douglas M. Atkin, chief executive of Instinet International, because they began closing floors and automating 10 years ago.

Take the highly advanced Stockholm Stock Exchange, the first to go public and to give member firms remote access. Stockholm-based OM Gruppen, which owns the exchange, also owns Sweden's derivatives and commodities markets and has joined forces with Denmark's bourse. "This is just the first step in our ambitions to create a Nordic trading platform," says CEO Lars Bredin. The Swedish exchange is discussing an alliance with Finland and Norway and has begun selling its off-the-shelf trading technology to exchanges in Australia and elsewhere. If the SEC allowed it, the exchange would have its system installed on U.S. brokers' terminals tomorrow.

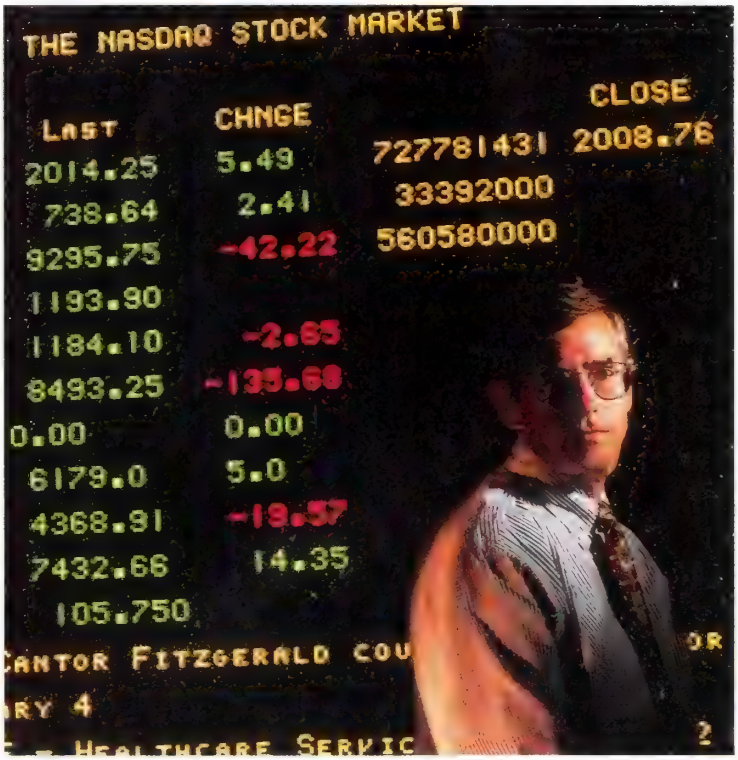
INVESTOR POWER. The SEC isn't quite ready to let that happen, but clearly it's in the mood to experiment. For years, the regulatory agency was a bulwark against market restructuring. Levitt is giving the green light to new systems as long as they comply with the investor-protection and antifraud rules. Even more far-reaching, the SEC last year required NASDAQ market makers and electronic systems to display customer orders in the main NASDAQ network.

Almost overnight, NASDAQ became more open and understandable. Liquidity, or the measure of how easy or difficult it is to trade a stock, increased. And the gap between buy and sell orders shrank, transferring $25 billion from NASDAQ dealers to investors. "The single most fundamental change to the equity markets in the last 20 years has been the SEC's order-handling rules," declares Datek's Citron.

However, regulators can't rest yet. For global markets to become a reality, they must coordinate investor-protection and antifraud regimes, which vary greatly by country. The SEC, for example, insists that only foreign securities registered with the agency may be sold in the U.S. And to register, foreign companies must comply with American accounting standards, which are stricter than most countries' and have the effect of lowering profits. Grasso and others are lobbying Levitt to accept less strict international rules, but so far those efforts are in vain. Says Levitt: "I'm absolutely dead set against diminishing the quality of any of our accounting standards."

Even the SEC's best and brightest aren't sure where the revolution in cybermarkets is headed, and the hidden dangers worry them. OptiMark, for one, has its disadvantages. Orders sent to the supercomputer aren't displayed anywhere, and that could deprive the markets of crucial information. If cl markets cause the disappearance f termediaries—the NYSE floor br who interact with the specialists match the trades, or the NASDAQ ket makers who commit their own ital—markets could be hurt.

MISSING BUFFER ZONE. This is espe true if the bull market suddenly bearish. In a down "the need for inter aries to provide liq becomes paramount, John N. Tognino, chi ecutive of the Sec Traders Assn. "Yo hide a multitude o in a bull market." Al line traders, mar them new to the market, could be left ing shares that hav most of their valu can't be unloaded. now, studies show online traders are g below-market rates turn. This may be pening because th trading too much. cheap and easy. Pr button, and off it says Merrill Lynch's fens. "The ability to for the sake of tr doesn't produce results."



WRITING ON THE WALL: *NASD's Ketchum predicts Net trades soon*

And there are than a few nays While many exchang shutting down their floors, the N looking for a new building so it c most triple floor size, to 100,000 s feet. Even the NASD is hedging its "I don't think floors will disap says Amex President Thomas F. Jr. Next year, Amex will have ar tronic order delivery system, bu exchange won't be closing dow floor or getting rid of its floor sp ists, Ryan insists.

Still, technology has opened up dant new opportunities for com that sell securities and investor buy them. Just exactly where this of remarkable change sweeping t nancial markets is going is uncle few doubt the momentun unstoppable.

By Paula Dwyer in Washin with Andrew Osterland in Ch Kerry Capell in London, and S Reier in Paris

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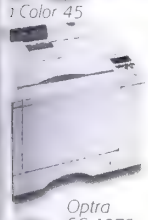
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INVESTIGATIONS

MONEY LAUNDERING ON WALL STREET?

The FBI says Aleks Paul was a conduit for shady brokers

By all outward appearances, Aleks Paul embodies the American dream. His nickname is Russian—"Losha"—but he came to the U.S. from Israel, not the former Soviet Union. In his 11 years running a jewelry business out of a tiny booth in Manhattan's 47th Street Diamond District, the 40-year-old Paul accumulated all the trappings of upper-middle-class solidity, from a two-year-old Mercedes-Benz to a modest home in the prosperous Long Island suburb of Kings Point.

But there is a dark side to Aleks Paul—or at least, so says the FBI in court papers filed under seal in the U.S. District Court in Manhattan. On July 17, Paul was quietly arrested by federal agents and charged with violating federal currency reporting laws. As alleged by an FBI agent in the sealed criminal complaint against Paul, a copy of which was obtained by BUSINESS WEEK, Paul is accused of having a sideline involving not gemstones but rather the fool's gold of Wall Street—fraudulent micro-cap stocks.

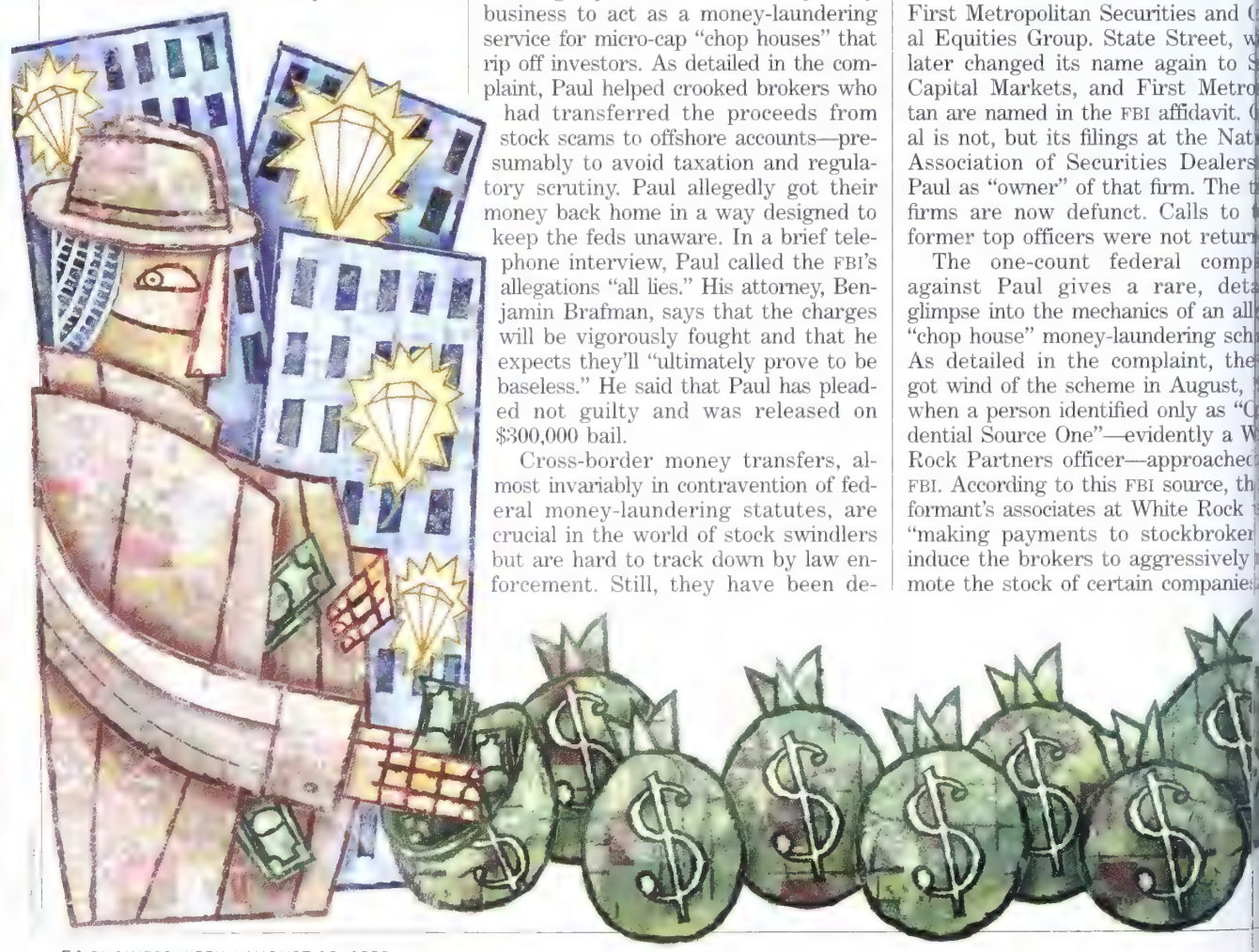
According to the federal complaint, the obscure jeweler led a double life. He allegedly used his wholesale jewelry business to act as a money-laundering service for micro-cap "chop houses" that rip off investors. As detailed in the complaint, Paul helped crooked brokers who had transferred the proceeds from stock scams to offshore accounts—presumably to avoid taxation and regulatory scrutiny. Paul allegedly got their money back home in a way designed to keep the feds unaware. In a brief telephone interview, Paul called the FBI's allegations "all lies." His attorney, Benjamin Brafman, says that the charges will be vigorously fought and that he expects they'll "ultimately prove to be baseless." He said that Paul has pleaded not guilty and was released on $300,000 bail.

Cross-border money transfers, almost invariably in contravention of federal money-laundering statutes, are crucial in the world of stock swindlers but are hard to track down by law enforcement. Still, they have been described as widespread by chop-h brokers and traders (BW—Dec. 5 What the feds usually lack is inside guide prosecutors, and then ju through the web of deals. In this ca seems, the feds struck gold. They three cooperating witnesses, tw whom, described but not named in complaint, have already pleaded g to money laundering and other cha

Apparently the feds and their "o erators" will be busy in the weeks months ahead. People familiar with inquiry say that further arrests are pected imminently, and that the as-yet-unpublicized investigation is tinuing. According to those familiar the firms involved, investigators been seeking details of possible volvement of Russian and Italian o nized crime groups, though no such nections are alleged in the complai

RARE GLIMPSE. Even the limited de described in the complaint ensnare t of the most important names in the er reaches of the micro-cap wor State Street Capital Markets (refe to in the FBI affidavit by its fo name, White Rock Partners) as we First Metropolitan Securities and G al Equities Group. State Street, w later changed its name again to S Capital Markets, and First Metro tan are named in the FBI affidavit. al is not, but its filings at the Nati Association of Securities Dealers Paul as "owner" of that firm. The t firms are now defunct. Calls to former top officers were not retur

The one-count federal compl against Paul gives a rare, deta glimpse into the mechanics of an all "chop house" money-laundering sch As detailed in the complaint, the got wind of the scheme in August, when a person identified only as "C dential Source One"—evidently a W Rock Partners officer—approache FBI. According to this FBI source, th formant's associates at White Rock "making payments to stockbroke induce the brokers to aggressively mote the stock of certain companie



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Approved: Marc L. Murasey
Assistant United States Attorney

Before: HONORABLE NAOMI REICE BUCHWALD
United States Magistrate Judge
Southern District of New York

UNITED STATES OF AMERICA, : SEALED COMPLAINT

- v.- : Violation of 18 U.S.C. § 371

ALEXE PAUL a/k/a "Losha," : COUNTY OF OFFENSE NEW YORK

Defendant. :

SOUTHERN DISTRICT OF NEW YORK, ss.:

KEVIN O'GRADY, being duly sworn, deposes and says that he is a Special Agent with the Federal Bureau of Investigation, and charges as follows:

COUNT ONE

1. From in or about 1995 up to and including at least on or about February 5, 1998, in the Southern District of New York and elsewhere, ALEXE PAUL, a/k/a "Losha," the defendant, and others known and unknown, unlawfully, wilfully and knowingly did combine, conspire, confederate and agree together and with each other to commit an offense against the United States, to wit, to violate Section 5324 of Title 31, United States Code.

2. It was a part and an object of the conspiracy that PAUL, a/k/a "Losha," the defendant, and others known and [illegible] of evading the reporting requirements of Code, Section [illegible] and

The Paul case has ensnared some of the most important names in the netherworld of micro-caps, including State Street Capital

PAUL'S ADDRESS IN THE DIAMOND DISTRICT AND THE FBI COMPLAINT

principals owned stock in to raise the stock's market price." According to the confidential informant, Paul "assisted the principals of White Rock"—none of whom are identified in the complaint—to hide the profits from regulators.

The first leg of the scheme, the FBI maintains, began when principals of White Rock opened accounts in Europe and the Caribbean and "transferred the proceeds of their securities trading into these accounts." The funds were then allegedly transferred to accounts in Israel and Switzerland controlled by Paul. When the money arrived in the Israeli and Swiss accounts, the FBI affidavit continues, Paul transferred an equivalent amount of cash from his 47th Street jewelry business to the principals of White Rock—in batches of $200,000 to $300,000 at a time. Since the cash did not go directly from the offshore accounts to the White Rock principals, the FBI alleged, Paul was able to avoid federal requirements that banks file "currency transaction reports" identifying the source of the cash. Paul's fee, according to the FBI, was a tidy piece of the action—5%.

According to the participant-turned-informer, who says he traveled to Europe to set up the accounts there, this scheme was used in 1995 to enrich White Rock's principals in the initial public offering of an obscure Corona (N.Y.) construction company called U.S. Bridge of N.Y. Inc. The informant told the FBI, the affidavit notes, that principals of White Rock "paid stockbrokers to aggressively promote U.S. Bridge stock." The White Rock principals cashed in their stock at inflated prices. Paul is quoted as saying this past February that the White Rock principals "had about $7 million in proceeds of stock deals overseas"—a reference, apparently, to other stock deals as well as U.S. Bridge. That company's president, Joseph Polito, vigorously denied knowledge of the wrongdoing alleged in the FBI affidavit. The firm recently changed its name to USA Bridge Construction of New York. The stock, which traded at $11 in late 1996, has fallen below $1.

RESILIENT SCHEMES. A "Confidential Source Two" materialized for the FBI in November, 1997. According to the FBI affidavit, this person has pleaded guilty to apparently unrelated charges of possession of forged securities and interstate transportation of stolen property. "CS2," as the FBI calls him, taped himself last December at a meeting with a person described only as "co-conspirator one." This person's name and brokerage affiliation are not disclosed in the affidavit, but the affidavit says he met the FBI informant at the Manhattan offices of First Metropolitan Securities—a recently defunct brokerage that has been the subject of a series of regulatory actions and investor complaints. According to the FBI, "co-conspirator one" had about $3.8 million in overseas accounts from stock deals that he wanted to bring in[to] U.S.

The FBI seized the opportunity [pre]sented by this wad of offshore [cash]. At the direction of the FBI, accord[ing to] the affidavit, its informant conv[eyed] about $1 million in overseas funds [to] cash for "co-conspirator one" and [a] ilarly shadowy "co-conspirator t[wo]" also apparently from First Metr[o]tan—and other unnamed person[s]. this took place between January [and] April, 1998, the FBI maintains.

If nothing else, the Paul prose[cution] is notable for something not ment[ioned] in the affidavit: the resiliency of [the] stock schemes. State Street/White [Rock] is no longer in business, but its f[ormer] president, John Doukas, can be [found] at AIBC Investment Services' New[York] office—Suite 4047 at One World [Trade] Center. And that just happens [to be] the former offices of State Street. [The] Metropolitan is no longer in bus[iness]. But a call to the old office phone [num]ber of its former chairman, Salv[atore] Morreale, is answered at his ne[w] fices—LCP Capital Management. Th[e] men did not return calls.

Like AIBC, LCP was the subject [of a] recent "sweep" by state regulators [several] eral of whom have sought pen[alties] against LCP, notes Alabama secu[rities] commissioner Joseph Borg, who ha[s] ed against both firms. Usually, the[se] cipals of chop houses have been a[ble] shrug off regulatory attacks. But [with] the feds targeting their all-impo[rtant] cross-border money spigot, they're [start]ing to get hit where it really hur[ts].

By Gary Weiss in New

GENE G. MARCIAL

ORE CALLERS DIAL WEST'S NUMBER

ephen Dalton, head of First Capital Group, thinks he has spotted an up-coming prize in telecom gear and ices, a fast-growing field. His pick: st Communications International T), the fourth-largest long-distance ier serving retail and wholesale omers.

t is dwarfed only by WorldCom," Dalton, who manages assets of e than $1 billion. Dalton's record in ng mispriced stocks has beaten the et indexes. In the first half of 1998, roup, a unit of First Union, posted s of 22.7%, vs. 17.7% for the Stan- & Poor's 500-stock index.

alton says Qwest is well fixed to advantage of changes in the indus- including growing demand for in- ed bandwidth capacity and Inter- elated services. Qwest, which got a report in this column in late Feb-

ON: *Qwest is e understood"*

ruary, when it was trading at split-adjusted 36, has risen to 40¾ by July 28. Qwest is "still little understood" and deserves a higher valuation, says Dalton. He expects the stock will hit 60 in a year.

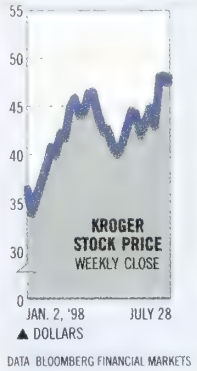
Certain analysts are also high on Qwest. Neither the merger of and British Telecom nor Bell At- 's purchase of GTE has dampened enthusiasm. Those deals "highlight alue of Qwest, with its state-of- rt, U.S. long-haul network, and g back office systems," says Blake of Lehman Brothers. Qwest is ing an 18,440-mile fiber-optic net- , scheduled for completion by mid- Bath figures Qwest will post earn- of 33¢ a share in 1999, vs. an ated loss of 11¢ in 1998.

alyst William Vogel of Nations- Montgomery Securities says t will "continue to do well," part- cause it's the only company with a ork in place for "data Internet ocol connectivity." And it is likely, he adds, that Qwest will also "enter into a partnership with a European communications company over the next few weeks." Qwest spokesman Steven Jacobsen says the company is aggressively evaluating its options in Europe.

IS SAFEWAY WOOING KROGER?

The buzz may not have reached the deli counter, but talk at Kroger (KR) supermarkets is all about the stock, which has been hitting new highs. Kroger shares have climbed 33% so far this year, and are now at 48—just off the peak of 50, reached on July 21, 1998. What's going on? Apart from better earnings, renewed takeover whispers have fueled interest in Kroger, says Elaine Hahn, president of Hahn Capital Management in San Francisco, whose track record in bagging takeovers has been good. In 1997, half of Hahn's 12 core stocks ended up being acquired.

PAYING MORE AT THE CHECKOUT



DATA BLOOMBERG FINANCIAL MARKETS

Kroger, which operates 1,400 supermarkets and 815 convenience stores in the Midwest and South, may be the target, says Hahn, of Safeway, with 1,360 stores in the U.S. and Canada. Hahn says Safeway has built up a $2 billion cash hoard for a new acquisition.

A big part of Safeway's growth has come from acquiring other grocery chains. "The fit between Kroger and Safeway in terms of strategy and management style is almost perfect," says Hahn. She notes that both focus on improving operating profit margins through cost-cutting and through raising prices in high-margin superstores. And the locations of their stores mesh well: Safeway's strongholds are the West, Southwest, and Mid-Atlantic regions. Analysts expect Kroger to earn $1.97 a share in 1998 and $2.30 in 1999, vs. last year's $1.65.

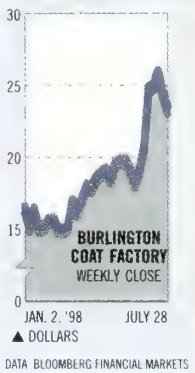
Should Kroger decide to stay independent, it could make an acquisition of its own, as has been rumored in the past. But Hahn says it's more likely that it will strike a friendly merger deal with Safeway. Hahn figures that in a buyout, Kroger would fetch $15.4 billion, or 60 a share. Safeway has a market value of $21.7 billion, vs. Kroger's $12.6 billion. A spokesman says Kroger doesn't comment on rumors. A Safeway spokeswoman wouldn't comment on the company's acquisition plans.

ALL BUTTONED UP AT BURLINGTON

Burlington Coat Factory (BCF) isn't exactly retailing's Rodney Dangerfield—who gets no respect. Burlington's stock has gained 43% this year, from 16 to 23 a share. But Bernard Sosnick of Genesis Merchant Group says Burlington is underpriced, compared with better-known peers: Over the past seven years, its earnings have risen at an annual rate of 14.3%—faster than rivals.

Burlington, which has 254 stores and sales of nearly $2 billion, "is creating a new image" as it diversifies without giving up dominance in outerwear, says Sosnick. Nordstrom earnings have disappointed investors during the 1990s, he notes. Yet its stock sells at a price-earnings ratio of 23, vs. Burlington's 13. The Burlington p-e is also lower than J.C. Penney's, even though Burlington has a better earnings record.

GETTING WARMER FAST



DATA BLOOMBERG FINANCIAL MARKETS

In sum, Sosnick thinks Burlington is worth at least 30 a share or a p-e of 19, based on estimated earnings of $1.55 for the year ending June 30, 1999, and $1.85 in 2000. Burlington has been granted "anchor" unit status in shopping centers and malls, so it plans to add footage at a yearly rate of 8% to 10%, says Sosnick. It also plans to relocate, expand, or remodel 40% of its stores over the next three years. Burlington has avoided cyclicity, he says, by adding men's suits, women's apparel, and juvenile furniture to its product line.

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SPACE JAM

The stakes were huge, both for science and NASA. B moments after Pathfinder's launch, all seemed lost

Last summer's Pathfinder exploration of Mars was one of NASA's most successful missions. The Pathfinder spacecraft and its tiny rover, the "one-foot geologist" called Sojourner, sent back stunning pictures of the planet. Data from the mission showed that Mars was once warmer and wetter than previously believed, raising the prospects for finding evidence of past life.

But minutes after it was launched, the Pathfinder spacecraft nearly succumbed to a mysterious communications problem. Even as NASA publicly celebrated the successful launch, fears were rising in mission control that Pathfinder might be doomed. The story is told here for the first time, in this excerpt adapted from Mars: Uncovering the Secrets of the Red Planet, *by Paul Raeburn, BUSINESS WEEK's senior editor for science and technology.*

Shortly before 2 a.m. on Dec. 4, 1996, the night sky over Cape Canaveral, Fla., was illuminated by the roaring exhaust of a Delta II launch vehicle carrying an interplanetary spacecraft unlike any other in the history of space flight. The mission was to return an American probe to the surface of Mars for the first time in 20 years.

The planet, the fourth from the sun and one of Earth's closest neighbors, is a cold and desolate place, its surface a rust-red desert. Yet it is our solar system's one planet, aside from Earth, that could harbor life. Perched atop that Delta II rocket was a Mars-bound spacecraft called Pathfinder. It was not designed to look for life but rather to inaugurate a second round of explorations that could lead to a manned mission early in the 21st century. Pathfinder was to give scientists their first close look since 1976, when Viking spacecraft returned the pictures from the ruddy Ma surface.

As Pathfinder soared to begin its 309-millio journey, Mars was visible on the ho A cheering mi control team wa settling in to tor the flight something wrong. "As as we starte ting data, when we fi out that we this big prob remembered ard Cook, Pat er's mission m er. Cook asked e the engineers mo ing the flight to on the status of the sion from their persp "You go around the and everybody says, 'Yea working fine.' Until one of said, 'I don't see any data!' We ed looking at the situation, and this feeling builds up: My God, this is it is the end."

When Pathfinder was launched, its first task was to its position relative to the sun and tell mission cont which way it was pointing. What Cook quickly learne that a sensor that was supposed to report on that fu was not providing any data.

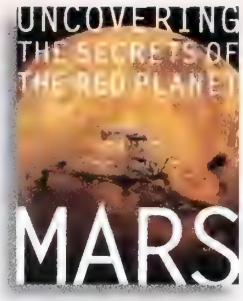
MISPLACED CONFIDENCE? The potential ramifications huge. Pathfinder, a three-foot-tall, 1,973-pound tetrah packed with more computing power than any spacec history, was a radical departure from its predecesso 1976 Viking. Indeed, Pathfinder was a departure fro thing NASA had previously attempted. The Viking missio of NASA's most ambitious and sophisticated interpla missions, cost $1 billion in the 1970s—the equivalent of

Excerpted from Mars: Uncovering the Secrets of th Planet *by Paul Raeburn, published by the National graphic Society. Copyright 1998 by the National Geogr Society. Text copyright 1998 by Paul Raeburn.*

$3 billion in 1997 dollars. The total budget for finder was a scant $265 million—less than enth the cost of Viking. That included $55 n to launch the spacecraft, $14 million to he mission, and, for the first time ever, a te-controlled, camera-equipped rover built at t of $25 million.

Pathfinder failed, the consequences for NASA's exploration program would be devastating. gency was determined to prove that it could the costs of planetary missions while con- g to bring back high-quality e. Pathfinder was supposed vide the proof. If Pathfind- iled, the Mars program l face years of delay, and its approach to space explo- would encounter increased ific and Congressional skep- . As word of the problem the sensor spread, even Pathfinder's bright and brash team of scientists and engineers, who had been work- ith a building sense of anticipation throughout the proj- eared that their confidence and optimism might have misplaced.

at was particularly unnerving was that the launch had d so well. During Pathfinder's initial ascent, Cook and lleagues didn't hear anything from the spacecraft. That ccording to plan: Only the rocket was sending informa- ack to mission control at Cape Canaveral. Contact with acecraft was supposed to be made about 90 minutes af- unch, when Pathfinder would separate from the upper of the rocket and turn on its transmitter. That's when



"As soon as we started getting data, that's when we figured out that we had this big problem"

NASA's Deep Space Network—the agency's network of ground stations around the world—had to find the spacecraft and establish a communications link.

"For me, that was the defining moment," said Cook, who had never run a mission before. "The problem is, you don't know where the spacecraft is. The launch vehicle is good, but it's not perfect, so you need to do a kind of blind search. And a blind search is a scary term. I could see this thing going out there, and we wouldn't be able to find it."

Operators at the Deep Space Network's Goldstone Station in California were the first to report. They locked on to the rocket's third stage and waited for the signal from the spacecraft. At mission control, Cook, wearing a headset, waited for a voice report from Goldstone. "We have X-band acquisition at DSS-15," Goldstone reported, raising cheers throughout the control room. The Goldstone dish antenna designated DSS-15 had locked on to Pathfinder's signal, which was being sent on a channel in the "X" frequency band.

IN THE DARK. The cheers had barely subsided when Cook received the report that the sun sensor aboard Pathfinder was not returning any data. The sensor is a round disk, a little larger than a hockey puck, with a grating on the top and a series of photoelectric cells underneath. When sunlight falls on the sensor, the grating allows some of it to reach the photocells underneath. Depending on the angle of the spacecraft, the sun will strike only some of the cells. As the spacecraft

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changes position, some photocells fall into shadow and others are newly exposed to the sunlight. The spacecraft uses that information to monitor and correct its orientation, spin, and trajectory during flight.

Pathfinder's controllers quickly determined that not enough sunlight was reaching the sensor. Apparently, an explosive device used to separate Pathfinder from its rocket had deposited soot on the sensor, dimming the sunlight it received. The amount of light penetrating the sooty sensor was below what Pathfinder was programmed to recognize, so the spacecraft was ignoring the readings.

Book Excerpt
MARS

LOST IN SPACE. After some discussion, mission engineers devised a strategy. They would reprogram Pathfinder to lower the threshold at which it would conclude that the sensor was working. "We very quickly figured out how to get the software working, and we were excited," said Cook. "It was fixed, we were going to go on with the mission, and everything was wonderful." Cook and several others came in three days after the launch, on a Saturday morning, to transmit the files that would allow Pathfinder to accept the data from the sun sensor. He told his wife he would be home in a couple of hours.

"We had these three files we were going to send up, and we said, no problem, we'll just dash 'em off. So we send them up, and they don't get there. The spacecraft rejects them. So we send them again and again, and it just doesn't work." Very short files seemed to be reaching the spacecraft, but longer files were not being accepted.

As Cook struggled with the files, the controllers monitoring spacecraft communications said they noticed the signal from Pathfinder momentarily faded every five minutes. This dip was puzzling; there was nothing on the spacecraft or on the ground that was happening every five minutes. "We figured that was unrelated," Cook said.

As the transmission problem continued, the population of the control room started to grow. Cook called in Tony Spear, the project manager for the Pathfinder mission. Soon, as word of the trouble spread, others began to trickle in, including Donna A. Shirley, the manager of NASA's Mars exploration program. "Pretty soon, there are a zillion people here trying to figure out what's going wrong," Cook said. "I wouldn't say panic had set in, but it was beginning to." Publicly, all that the engineers said at the time was that they had a minor communications glitch that they were ta care of. There was no mention of the drama that was b ing in mission control.

The assembled multitude decided that the files m reach the spacecraft if they were broken into tiny f ments. The three files that Cook was trying to sen Pathfinder were broken into about 30 tiny files. "Son them get in and some don't, and so we start tryin change all kinds of things with the telecom configuratio this time, about 12 hours had passed. I called my wife said, 'Yeah, I was supposed to be home about nine hours but I'm still havinga problem.'"

He was about to discover the problem might be even ger than he thought. Or the telecommunications cialists had continued to s the strange five-minute d the signal from the space Perhaps it was related t file-transmission problem all. As he was trying to cover the source of the minute dip, the woes of I finder appeared to worse was not only files that being rejected—Pathfi was now starting to reje rect commands sent from sion control. "There's no worse than that, from point of view, because our ability to make something pen is to be able to se command to the spacecr said Cook. "If it's not list to us, that's it. If we lost munication, it was going end of mission."

SPIN CONTROL. The tel specialist then realized the five-minute dip was a leading consequence of way the signal from the s craft is measured. Pathf was spinning as it through space, and the s was actually dipping b with every spin—or every five seconds. For nical reasons, measures signal were registering th only once every five mi The files—and even mands—were not reachin spacecraft because of the odic interruption. Files or mands that took longer five seconds to transmit not getting through. Shorter files would get through multiple transmissions when, by the law of averages, happened to be sent inside one of the five-second win "There was some piece of metal or something else tha causing the signal to glitch every time the spacecraft around," Cook said.

Once the nature of the problem became clear, Cook a team had a solution. Paradoxically, they decided to data to Pathfinder at a much slower rate. Even though mands and files would then take longer to reach the s craft, the slower transmission rate would enable Pathfi

PENNY PINCHER: AT A SCANT $265 MILLION, PATHFINDER CAME IN AT LESS THAN ONE-TENTH THE COST OF THE 1976 VIKING MISSION

Pathfinder was aimed at Capitol Hill as much as it was at Mars

-correction system to accept the missions.
e interruption in the antenna sig-as the result of something on the craft that hadn't been taken into int during design. The antenna een tested before it was attached e spacecraft, and it had worked But it wasn't tested after it was ed to Pathfinder. "The antenna n can change if you have a piece tal nearby; it doesn't have to be ly in the way of the antenna," explained. "It changes the anten-ttern enough that it causes the to occur."
gineers slowed the data rate from 7.8 bits per second, as slow as le. (Personal computers typically data over phone lines at 28,800 er second or even faster.) "The ands started getting in," Cook It was a very tense day. We were 20 hours—but it worked."

ROVING EYE: THE IMAGES FED BACK TO EARTH WERE TREMENDOUS CROWD-PLEASERS

For 20 frantic hours, controllers brainstormed

SAY NEVER. As soon as the files reached Pathfinder's ter, the sun sensor began working, and engineers on the d could determine the spacecraft's orientation. Once nformation was in hand, Cook and his team simply l the spacecraft so the antenna faced Earth more di- and the problem disappeared. Communications could re-at the regular rate.
ther the problem with the sun sensor nor the antenna m alone would have been difficult to solve, but the two problems together—a "multiple fault," as engineers call it—were nearly fatal. "One of the things you talk about when you're designing spacecraft is single-point failures vs. multiple faults," Cook said. Engineers ordinarily try to design spacecraft so they don't have a lot of single-point failures—individual problems that would each be enough by itself to doom the mission. Pathfinder, however, was different. Engineers had to allow design features that could lead to single-point failures. "Pathfinder had all kinds of those," Cook said.

That was the consequence, in part, of a new mantra at NASA that had been established for spacecraft design—faster, better, cheaper. No longer would millions upon millions be lavished on redundant designs intended to prepare for every imaginable potential failure. Instead, Pathfinder was given enough flexibility and computer power for the spacecraft to detect and correct problems on its own. Pathfinder's designers tried to give the craft flexibility to recover from a variety of single-point failures. "We said multiple faults would never happen," Cook said, with a chuckle. "And right out of the bag, there goes a double fault."

NASA had a lot riding on Pathfinder, and after that harrowing close call, the craft delivered. It went on to become one of NASA's most successful and spectacular planetary missions. The new age of Mars exploration had begun.

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EDITED BY CATHERINE ARNST

A SHOT A DAY KEEPS THROMBOSIS AWAY?

PATIENTS WHO HAVE HAD CHEST PAINS OR MILD HEART attacks face blood clots for months afterward—from clot-inducing proteins released into the bloodstream. But a new study raises hope that patients may be able to treat themselves at home for this risk by means of regular injections of the drug enoxaparin, marketed by Rhone-Poulenc Rorer under the brand name Lovenox.

Enoxaparin is a small-molecule version of the clot-busting drug heparin. Researchers led by Dr. Gilles Montalescot at Pitié-Salpetrière Hospital in Paris report in the journal *Circulation* that levels of a clot-inducing protein called the von Willebrand factor increased dramatically in the 48 hours after a heart episode for patients treated with heparin, but far less when enoxaparin was used. In follow-up studies, 9 out of 34 patients treated with enoxaparin had another heart episode, compared with 17 of 34 patients who received heparin.

In an editorial in the same journal, Dr. Elliott Antman of Brigham & Women's Hospital in Boston says: "This new research might allow physicians to prescribe relatively unsupervised long-term self-administration of anticlotting therapy, sort of an insulin-like injection for coronary artery disease." □

INNOVATIONS

■A team of Australian researchers has created genetically engineered peas that are resistant to the plant's worst enemy—the weevil. These hungry pests have the ability to devour a field of peas in no time flat. And if harvested peas are improperly stored, a small infestation of the weevil can lead to devastating losses.

The genetically engineered peas have a protein built in that blocks a weevil's digestive enzyme. Humans utilize the same enzyme in their bodies, but the Australian researchers, from the Commonwealth Scientific & Industrial Research Organization in Canberra, say that their peas will not interfere with human digestive systems. That's because people have far more of the enzymes than weevils do. The peas will be available to farmers by the end of 1999.

■If you're tired of Top 40 radio, how about a little whale music? On July 22, the Vancouver Aquarium went live with ORCA-FM, an all-whale station that broadcasts the clicks, pops, and squeaks that killer whales use to communicate with each other. ORCA-FM picks up the fishy chatter with an underwater microphone about 120 miles off the coast of British Columbia, in a popular whale gathering spot called the Robson Bight. The live signal can be received by passing ships and is delivered by high-quality phone lines to the aquarium, where visitors can listen in on portable radios. The aquarium eventually plans to give the whales a much larger audience by broadcasting over the Internet.

UNSNARLING TRAFFIC JAMS AT U.S. AIRPORTS

IT'S SUMMERTIME, AND THAT means vacationers stuck in airports or circling the skies, held hostage to delays. Every day, 700 to 1,100 U. S. flights are held up 15 minutes or more, costing $3 billion a year in fuel and overtime. Now, Dimitris Bertsimas of Massachusetts Institute of Technology and Sarah A. Stock Patterson of Duke University have come up with a mathematical model that they say could greatly reduce flight congestion.

Currently, if a flight faces a landing delay at its destination, controllers hold the plane on the ground at its starting pi rather than let it take of circle. To improve this tice, the researchers mathematical formulas take into account all con ing flights at all airports up by delays. Lightning computations allow the n to make real-time chang thousands of flight schedu and can recommend redi ing flights away from cro airports. Based on se simulations, researchers f they could cu lays by 30%.

PILEUP: *A new model helps redirect flights*

The m partially fu by the Fe Aviation Adm tration and lished in *Op tions Rese* will be adopt the U.S. irt next few and is in lir use in Euro *Nellie And*

A TRUER TEST FOR BREAST CANCER

DIAGNOSIS OF BREAST CANCER USUALLY STARTS WITH discovery of a small lump, during a general physical exam or a mammography, and then proceeds through variety of tests, including surgical biopsy. Because su tests are imprecise, most of these lumps turn out to harmless—nearly 80% of the 1 million biopsies performed in the U. S. each year turn up benign growth

In a large European study published in the British medical journal *The Lancet*, a new noninvasive diagn tic tool similar to an electrocardiogram was found to far more precise than other nonsurgical methods in d tecting cancerous tumors in premenopausal women. I agnosis is toughest among such women because their breast tissue is dense. The Biofield Diagnostic Syste developed by Biofield Corp. in Roswell, Ga., analyzes disturbances in the skin's electrical field caused by ca cerous cells in about 20 minutes. A team led by Dr. Jo Cuzick of the Imperial Cancer Research Fund in Lon don examined the results of tests on 661 women wh underwent breast biopsies at eight European medica centers. Researchers found that more than half the biopsies could have been avoided if the women had be screened first with the Biofield system.

Biofield says its product, which costs about $30,00 will be launched in Europe later this year, and U.S. clinical trials are about to start.

FOR FURTHER INFORMATION: Go to Business Week Online at America Online or E-mail dtwaug@businessweek.com

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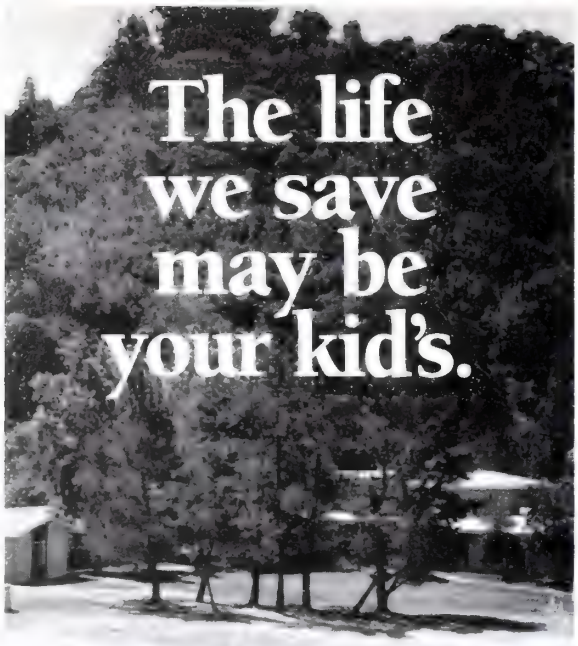

TROUBLED TEENS AREN'T NEWS any more. Last year, over half a million California kids were reported as abused or neglected. On any given day, 20,000 found their way into juvenile detention facilities because they broke the law. Teen pregnancy, suicide and drug abuse are everyday stories. Even scarier, the odds that your kid will become one of these statistics is about one in five.

There's a ray of sunshine, however. It's that places like Sunny Hills exist at all.

We help difficult kids. And impossible ones.

Consider Patrice. She's a real person, and she's in the picture to the right. When she came to Sunny Hills two years ago, she described herself as a liar who hated herself and wanted to die. In August, she left Sunny Hills to enroll at Kings River Community College. She put it this way:

> *Sunny Hills taught me to believe in myself. Now I know that I'm somebody. I've learned to be honest, to trust people, and to make good choices. I know I'll be okay."*

Her recovery wasn't a lucky accident. It was a matter of intensive treatment, monitored recuperation and controlled reentry. She lived on the San Anselmo campus where she received 24-hour supervision and treatment along with an individualized education program.

As her behavior improved, she worked into the job training program and eventually into aftercare. In all, Sunny Hills' six different residential and treatment programs at four ferent locations.

Saving lives is hard wo

Marin is fortunate to have a Sunny Hills, but the proble far greater than Sunny Hills handle on its own.

Frankly, we need help. so much the big-check or dedicated-volunteer type of (although we're delighted whenever either of those th happen).

We need the very simple small-scale kind of help tha anyone reading this messag offer, effortlessly.

The Bargain Box and the Grape Festiva two painless ways to he

First, you can help the next you clean out your closet. E whatever you're passing along to the Bargain Box in S Rafael, and, while you're there, check out whatever we for sale.

Yes, there are other thrift shops around, and there be one closer to where you live. But it can't help North California's troubled kids as much as ours can.

Second, enjoy the crafts, music and gourmet food Grape Festival on the first Saturday in October at Lark Landing. It's all for fun, and it all benefits Sunny Hills.

It's not much to ask. B you find time to do those t little things, you'll be helpi save another Patrice.

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A Business Week Special Advertising Section

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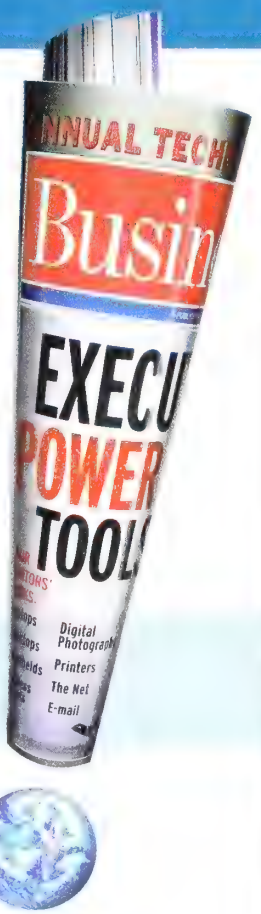

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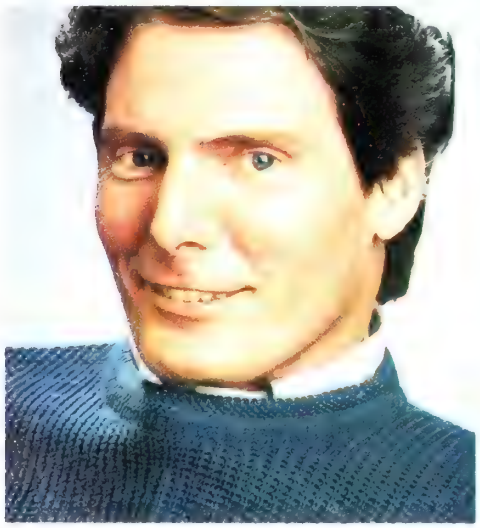

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companies are paying lavishly to tee off with golf greats

gine hiring a former U. S. Open mp to pal around for a day with r and your best customers. You rt off with a golf clinic, enjoy a d four- or five-hole playing les- ld round out the dream date with mate dinner, at which the pro re- your guests with tales about com- against Jack Nicklaus, Tom Wat- ld other fairway legends.

v much would this day of celebri- noozing set you back? In a world -rising personal-appearance fees, ure probably went up in the time to read this sentence. For one- itings, prominent players on the our, Senior PGA Tour, and LPGA commonly command fees of). Many charge more, including Tour veteran Dave Stockton 0), former U. S. Open titlist Tom $40,000), and last year's British champ, Justin Leonard 0).

SING CLIENTS. Even at prices, it's worth it to an ing number of corpora- Sure, the money borders outrageous, especially if shows up an hour late wls his way through a But if the mood is right, etter to impress a key han pairing him with a hose name adorned the oard at the British

about projecting an im- ays Walt Galanty of Ac- Imaging Marketing Inc., xandria (Va.) company ranges private outings. they host one of these , companies are saying clients: 'Look at us, we he ability to bring in a Stockton, a Lee Trevino, Floyd.... Shouldn't you g business with us?'" e corporations hook up olfers for the long haul. s been entertaining ex- s of a steel company for 's. Nearly 30 years ago, American Airlines Inc. hired Stockton to give clinics and play a few holes with its power clients. He's still preaching the gospel of proper alignment. This year, Stockton will appear at two or three events for the airline. "Dave has built bonds for us with key customers," says Michael W. Gunn, American's senior vice-president for marketing. "We think we get more than our money's worth."

Competition for the most recognized players can be intense—and expensive. Nicklaus and Arnold Palmer no longer dominate tournaments, but the golfing greats rake in enormous fees for outings, $75,000 per day and more. Nicklaus generally confines his appearances to corporations he represents and to events held at golf courses designed by his company. Greg Norman is noted for refusing all but a few offers. For the budget-minded, Gary Koch, a TV golf analyst and former tour player, charges $12,500 to $15,000.

"TRICK SHOTS." The price of chumming around with golf idols is going up. Kite hired out for $2,500 a day as recently as 1985. Before Leonard won the British Open, his fee was about $10,000. In part, higher fees reflect increases in prize money. "Purses have escalated so greatly and golfers are making so much money, they're not nearly as willing or interested" in performing at outings, says Vinny Giles, who represents Kite, Leonard, and other tour golfers. "So... they set their fees higher and tell everyone, 'I'll do it—at my price.'"

Other golfers set their fees lower, seeking to build their bookings for the long term. The master builder is Stockton, a solid player during his years on the regular tour and winner of the '70 and '76 PGA Championships. In the mid-1970s, looking to spend more time with his family, Stockton curtailed his tournament schedule and turned to outings, appearing at as many as 90 some years, for companies including Merrill Lynch & Co. and Travelers Group.

> "If I can give a tip that will cut a handicap by four shots, [corporate guests are] hard-pressed to get a better present than that"

Stockton found he enjoyed the events and that audiences enjoyed listening to him. "My goal is for everyone to go home having heard something that'll help them improve their game. If I can give a tip that will cut a handicap by four shots, they're hard-pressed to get a better present than that," he says and questions whether some other pros give as much. "A lot of the pros have routines. Some are humorous. Some are inspirational. The ones I really don't care for are from the players who show up, get their fee, perform a few trick shots that don't help anybody—and leave."

These days, Stockton has whittled his outings to about 20 a year, allowing him time to play the senior tour, where he is one of the leading money winners. But there's nothing like a regular payday, and Stockton can always count on working Mondays for Corporate America.

By Mark Hyman

MASTER CLASS *Stockton gets $30,000 a day*

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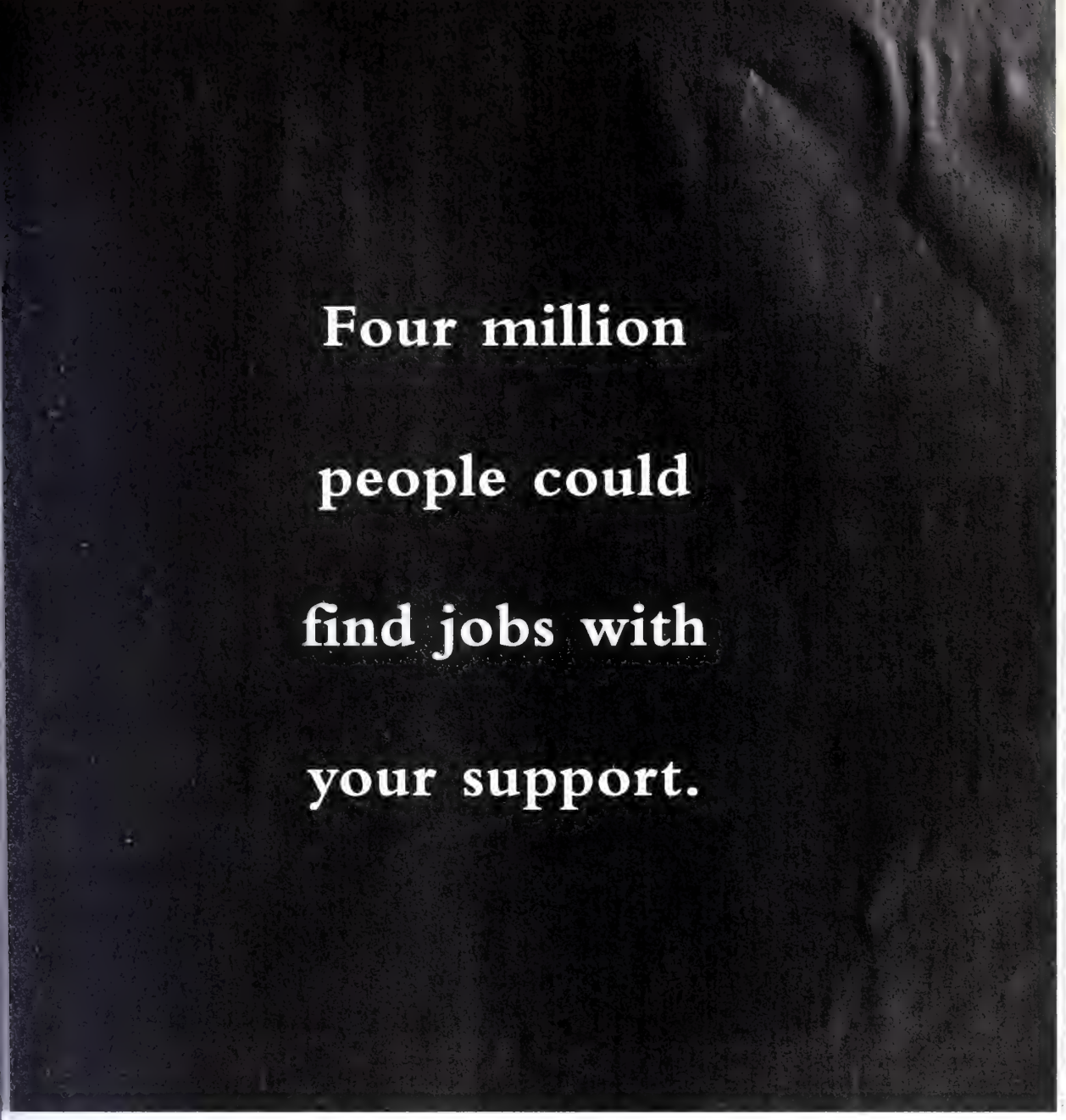

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WILY SURVIVORS IN ASIA

As the second-quarter earnings season rolls on, the casualty list from the economic catastrophe in Asia is getting longer. Boeing, DuPont, Hewlett-Packard, and other companies with big Asian revenues have gotten hit. But some multinationals have managed not only to survive the turmoil, they're actually thriving in the region. At the same time, others that have been tarred by their Asian exposure may not be as bad off as their depressed stock prices suggest (table). As a result, they may merit a second glance if you're a long-term, value-oriented investor.

Among companies weathering the crisis well are Tiffany, American International Group, and Mattel. In the case of Tiffany, the jeweler, and AIG, the global insurance group, this doesn't seem to make sense. Why would Tiffany, which gets 40% of its pretax profit from Japan, see its stock rise by 20% this year despite a Japanese recession? And why has AIG, known for decades for its strong Asian presence, turned in a 37% gain?

INVESTING

BRIDAL BUSINESS. At Tiffany, astute management is helping the company ride out the storm. "They initially got hurt on the perception that people in Japan would not be buying expensive jewelry," says Gary Fullam, director of research at Atlanta-based GLOBALT, whose GLOBALT Growth Fund focuses on U.S. companies with heavy overseas exposure. "But they've reorganized the way they do business in Japan, and have become much more efficient and better retailers."

For example, Tiffany now stresses engagement rings and wedding favors for its Japanese clientele. Engagement rings are about half of its business in Japan, vs. 20% in the U.S. "Regardless of the economy, people are going to get engaged," says analyst Peter Schaeffer of Warburg Dillon Read. But if the yen persists in weakening, the company could take a hit because its pricey goods would become even more costly in Japan—and Tiffany has already raised prices twice in the past year. It plans to boost sales by opening stores in smaller cities. "Unless Japan goes into depression, they will continue to do well," Schaeffer says.

AIG also gets a big chunk of its pretax profits from Asia—about 15% to 20%, says Jeffrey Hopson, an analyst with A.G. Edwards. For the second quarter, AIG's earnings rose 14% from the year-ago period. Growth in AIG's international life insurance unit slowed slightly, falling to 17%, year over year, from its usual 18% or 19%. Analysts seem unconcerned. Asians see insurance as a necessity, not a luxury, and as more of a savings vehicle, says Hopson. In contrast with many Asian insurers, whose financial stability has been threatened, "AIG is able to advertise a triple-A rating and can pick up market share," he says. To be sure, the collapse of many Asian currencies has affected AIG's earnings. But in much of Asia, "interest rates have moved up and new cash flow has been invested at higher rates," helping to offset the drag, Hopson says.

Other multinationals have benefited as manufacturing costs have fallen. Take toymaker Mattel. Merrill Lynch analyst Hayley Kissel says less than 5% of Mattel's sales come from Asia, but about 20% [illegible] its good[s] made in countries, s[uch as] Indonesia, that have s[uffered] currency devaluations. [It] also gets a boost from [cheap] worldwide in demand f[or] tic resins, the largest [component] nent in its manufac[turing] costs. And so far, Mat[tel] n't had to pass on tho[se] benefits to consume[rs]. you're a company with[a] brand equity, you can [get] premium pricing," says [Kissel.] She thinks Mattel co[uld] to the low 50s over th[e next] year, from 40% today.

Among hard-hit com[panies] with the potential to r[ebound], HSBC Holdings is ge[tting a] vote of confidence fro[m S]

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icorp.
signs of a bottom in
ian economies appear,

Weathering the Storm

COMPANY/ TICKER	STOCK PRICE*	52-WK. HIGH	COMMENT
AMERICAN INTL. GROUP AIG	152 15/16	153½	Insurer helped by flight to quality
APPLIED MATERIALS AMAT	31 1/16	54 7/16	Company's sell-off may be near end
FEDERAL EXPRESS FDX	63 3/16	84½	Asian shipments to U.S. are growing
J.P. MORGAN JPM	127 7/16	148¾	High quality and low book value
MATTEL MAT	40 1/16	46 7/16	Cheap Asian manufacturing a plus
TIFFANY TIF	43	52	Agile marketing keeps demand strong

*July 27

DATA: BUSINESS WEEK, BLOOMBERG FINANCIAL MARKETS

GLOBALT's Fullam plans to buy stocks such as Applied Materials, Federal Express, and insurer AFLAC. L. Roy Papp, who manages the Papp America-Abroad Fund, says Molex, a maker of electronic and fiber-optic interconnection products, and American Power Conversion, which makes power supplies, could also rebound. Michael Holland, of investment firm Holland & Co. in New York, favors J.P Morgan. The stock trades at less than two times book value, compared with 2.5 to 3.5 for competitors. "It's quality financial assets at a discount," he says. "When the Pacific Rim returns, these guys are there. They've already done the writing off."

As yet, the end in the Asian crisis is not in sight. Until signs of recovery appear, investors may find that researching stocks in preparation for a pickup is a smart move. *Suzanne Woolley*

RT MONEY

PEDIGREED ND GOES TAIL

nine years, ris Global Value has had a stel- un. Its returns 47% and 21.10% for the and five years ending 30 handily beat the an Stanley Capital national World Index' of 19.73% and 16.16%, ctively. But manager rd Horn wouldn't let uy in with anything $100,000.

w, Horn is going retail, rting Polaris from a l partnership o-load mutual with a $2,500 um (888 263- But don't ex- Horn, 43, a ate of Massa- ts Institute of ology's Sloan l of Manage- to make more es. "I ran my rship like a

HORN: *He sees bargains in Asia*

mini-mutual fund and didn't do anything that is often done in hedge funds such as leveraging or short-selling," he says.

A value investor, Horn searches a database of 16,000 companies worldwide and screens for 500 or so that can generate at least an 8% return annually, after inflation, in cash flow from operations. "Then the real scrubdown of the company financials begins," says Horn, who ultimately whittles the list to 50 stocks.

While nearly 80% of his portfolio is in Europe and North America, Horn is slowly selling some of these stocks to invest in Asia, where shares of companies are off more than 75% from their peak. He likes Takefuji, a Japanese finance company that makes unsecured consumer loans (table). He expects industry deregulation and Takefuji's top credit-scoring technology to sustain its healthy cash flow.

Beyond Asia, Horn harbors hope for South African Pulp & Paper (SAPPI), the world's leading fine-paper maker, which finally is benefiting from an industry revamp.

Despite the lofty levels of U.S. stocks, Horn sees values. He likes Fedders, the largest U.S. maker of air conditioners. It has restructured and shifted production to China. It has been buying back stock and has acquired Rotorex, the world's largest maker of compressors.

While he feels U.S. financial stocks are pretty much played out, he sees potential in Denmark's Jyske Bank, which has $9.2 billion in assets. "I can buy Jyske close to book value and less than 10 times earnings. U.S. banks are trading at 4 times book and 20 times earnings," he says. It's this kind of analysis that makes Polaris worth a look despite its short mutual fund life. *Toddi Gutner*

Bernie Horn's Global Value Picks

COMPANY (SYMBOL)	SHARE PRICE*	52-WEEK HIGH	COMMENT
FEDDERS, U.S. (FJC)	$7	7 7/16	Restructured air-conditioner maker
JYSKE BANK, DENMARK (JYBC)	119	127	Benefiting from consolidation
SAPPI, SOUTH AFRICA (SAPIY**)	4½	6¾	Made profitable paper acquisitions
TAKEFUJI, JAPAN	51	54	Superior credit-scoring system
VTECH, HONG KONG (VTKHY**)	46⅞	46⅞	Leader in cordless phone business

* July 27 ** American depositary receipt

DATA: POLARIS GLOBAL VALUE FUND, BLOOMBERG FINANCIAL MARKETS

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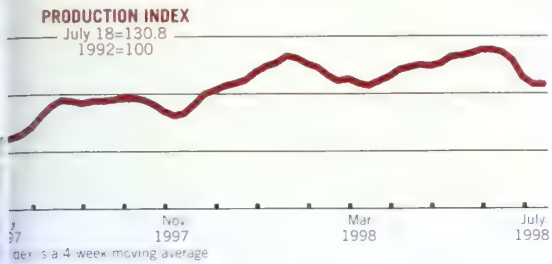
DUCTION INDEX

nge from last week: 0.0%
nge from last year: 3.6%



dex is a 4-week moving average

duction index was unchanged for the week ended July 25, while the ged index rose to 132.3, from 131. Electricity, which reached its third output figure of all time, was up, and autos and trucks also posted ail-freight traffic was down 5%, and the Association of American ls reported that loadings of motor vehicles and equipment was down from the comparable week last year because of the strike at General The production of steel, oil, coal and lumber was also down.

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DING INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
PRICES (7/24) S&P 500	1140.80	1186.75	21.5
RATE BOND YIELD, Aaa (7/24)	6.56%	6.58%	-7.5
SUPPLY, M2 (7/13) billions	$4,199.8	$4,213.8r	7.3
CLAIMS, UNEMPLOYMENT (7/18) thous	315	337r	5.4
AGE APPLICATIONS, PURCHASE (7/24)	252.4	255.0	22.6
AGE APPLICATIONS, REFINANCE (7/24)	1,320.2	1,292.2	121.5

: Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage Assn. (Index: March 16, 1990=100)

REST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
L FUNDS (7/28)	5.50%	5.51%	5.52%
RCIAL PAPER (7/28) 3-month	5.50	5.50	5.57
ICATES OF DEPOSIT (7/29) 3-month	5.60	5.60	5.58
ORTGAGE (7/24) 30-year	7.04	7.07	7.60
ABLE MORTGAGE (7/24) one-year	5.78	5.82	5.75
7/24)	8.50	8.50	8.50

Federal Reserve, HSH Associates, Bloomberg Financial Markets

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (7/25) thous. of net tons	2,013	1,962#	1.1
AUTOS (7/25) units	73,527	57,601r#	-32.1
TRUCKS (7/25) units	74,455	59,691r#	-30.9
ELECTRIC POWER (7/25) millions of kilowatt-hrs	79,676	77,565#	6.4
CRUDE-OIL REFINING (7/25) thous. of bbl./day	15,518	15,675#	4.7
COAL (7/18) thous. of net tons	21,099#	19,270	3.1
LUMBER (7/18) millions of ft.	498.2#	464.2	-1.6
RAIL FREIGHT (7/18) billions of ton-miles	25.7#	24.3	0.8

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPA1, SFPA2, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (7/29) $/troy oz.	290.750	293.950	-11.2
STEEL SCRAP (7/28) #1 heavy, $/ton	130.50	130.50	-9.1
COPPER (7/24) ¢/lb.	81.6	79.0	-28.4
ALUMINUM (7/24) ¢/lb	65.5	63.0	-15.5
COTTON (7/25) strict low middling 1-1/16 in., ¢/lb.	73.78	73.66	1.9
OIL (7/28) $/bbl.	14.16	13.53	-27.6
CRB FOODSTUFFS (7/28) 1967=100	226.88	229.16	-5.7
CRB RAW INDUSTRIALS (7/28) 1967=100	295.77	296.90	-12.9

Sources: London Wednesday final setting, Chicago market, *Metals Week*, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (7/29)	142.37	140.98	118.33
GERMAN MARK (7/29)	1.77	1.79	1.84
BRITISH POUND (7/29)	1.65	1.64	1.63
FRENCH FRANC (7/29)	5.94	6.00	6.19
ITALIAN LIRA (7/29)	1747.0	1766.0	1787.5
CANADIAN DOLLAR (7/29)	1.50	1.50	1.38
MEXICAN PESO (7/29)	8.904	8.865	7.780
TRADE-WEIGHTED DOLLAR INDEX (7/29)	114.2	114.0	106.5

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan

ta in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense t. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

HE WEEK AHEAD

AL INCOME

Aug. 3, 8:30 a.m.EDT ▶ Personal ikely rose 0.3% in June after a in in May, says the median forecast mists surveyed by Standard & Poor's nit of The McGraw-Hill Companies. r spending probably increased June, after surging 0.6% in May.

UCTION SPENDING

Aug. 3, 10 a.m.EDT ▶ Building rose 0.7% in June, after dropping May.

URVEY

Aug. 3, 10 a.m.EDT ▶ The National on of Purchasing Management's business index likely stood at 49% in July, down from 49.6% in June.

LEADING INDICATORS

Tuesday, Aug. 4, 10 a.m.EDT ▶ The Conference Board's index of leading indicators probably fell 0.2% in June, after no change in May.

BEIGE BOOK

Wednesday, Aug. 5, 2 p.m.EDT ▶ The Federal Reserve will release its report on regional economic activity.

FACTORY INVENTORIES

Thursday, Aug. 6, 10 a.m.EDT ▶ Manufacturers probably cut their inventories by 0.2% in June, reflecting a drawdown in vehicles at strike-beset General Motors Corp. Inventories rose 0.2% in May.

EMPLOYMENT

Friday, Aug. 7, 8:30 a.m.EDT ▶ The S&P MMS forecast expects a 55,000 gain in nonfarm payrolls in June, after May's 205,000 increase. The weakness reflects a loss of about 150,000 jobs related to the GM strike. The jobless rate likely remained at 4.5%.

CONSUMER CREDIT

Friday, Aug. 7, 3 p.m.EDT ▶ Consumers probably added $3 billion in new debt in June, after increasing credit by a mere $400 million in May.

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Business Week presents frequent live conferences and chats on America Online–your opportunity to ask questions about timely topics.

BusinessWeek ONLINE

Sunday

Take a lesson from Rob Levin, president of Holt's Cigar Co.—No. 5 on BW's 1998 Hot Growth Companies list. He's the guest at this week's BW Enterprise chat. **Aug. 2**
9 p.m. EDT

Tuesday

Hot to invest in semiconductor stocks? Tune in for Standard & Poor's analyst Brendan McGovern in another market chat presented jointly with S&P Personal Wealth. **Aug. 4**
4:30 p.m. EDT

Thursday

Scott Schoelzel, portfolio manager of the Janus 20 Fund, will share some of his investing secrets with us.
Aug. 6
9 p.m. EDT

AOL keyword: BW Talk

Transcripts of all conferences are available for downloading from the BW Online area on AOL soon after each event.

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This index gives the starting page for a story or feature with a significant reference to a company. Most subsidiaries are indexed under their own names. Companies listed only in tables are not included.

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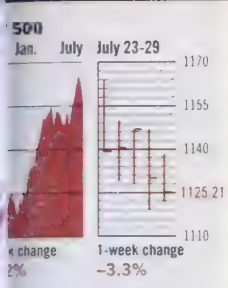
KS



ENTARY

suffered a bruising week
estors questioned whether
gs prospects could sup-
ock prices and analysts
rnings forecasts. As rip-
ects from Asia showed
second-quarter reports,
hips such as Hewlett-
d and DuPont warned
s to temper expectations.
evelopments in Monica-
lso unsettled the mar-
d the Dow industrials
the week down 2.3%,
he NASDAQ lost 4.5%. One
e: a tentative labor
ent between GM and the
Auto Workers.

U.S. MARKETS	Latest	% change Week	Year
Dow Jones Industrials	8915.0	-2.3	8.0
NASDAQ Combined Composite	1881.5	-4.5	18.5
S&P MidCap 400	346.1	-5.2	10.3
S&P SmallCap 600	179.2	-4.8	4.9
S&P SuperComposite 1500	238.1	-3.6	16.9

SECTORS	Latest	% change Week	Year
Bloomberg Information Age	362.1	-2.7	21.4
S&P Financials	136.2	-4.0	22.8
S&P Utilities	236.3	-2.2	17.5
PSE Technology	343.1	-4.5	6.0

FOREIGN MARKETS	Latest	% change Week	Year
London (FT-SE 100)	5844.1	-2.4	18.6
Frankfurt (DAX)	5853.6	-4.2	32.4
Tokyo (NIKKEI 225)	16,158.1	-0.8	-20.1
Hong Kong (Hang Seng)	7808.8	-7.3	-51.1
Toronto (TSE 300)	7000.1	-4.8	2.2
Mexico City (IPC)	4340.3	-4.9	-12.7

FUNDAMENTALS	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.38%	1.34%	1.59%
S&P 500 P/E Ratio (Last 12 mos.)	27.6	27.8	23.7
S&P 500 P/E Ratio (Next 12 mos.)*	22.0	22.4	19.1
First Call Earnings Surprise*	2.23%	2.32%	2.39%

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 200-day average	1042.4	1038.1	Positive
Stocks above 200-day average	37.0%	48.0%	Positive
Options: Put/call ratio	0.54	0.46	Negative
Insiders: Vickers Sell/buy ratio	1.47	1.50	Positive

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS	Last month %		Last 12 months %
Photography/Imaging	12.3	Broadcasting	91.4
Tobacco	10.9	Automobiles	70.6
Pollution Control	9.2	Specialty Appar. Retailers	69.8
Computer Systems	6.8	Long-Dist. Telecomm.	60.6
Long-Dist. Telecomm.	6.7	Entertainment	54.9

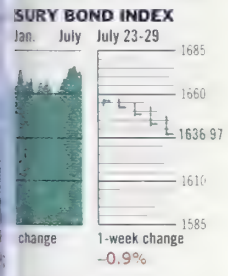
WORST-PERFORMING GROUPS	Last month %		Last 12 months %
Oil & Gas Drilling	-21.2	Oil & Gas Drilling	-49.0
Engineering & Constr.	-17.1	Metals	-48.0
Oil-Well Equip. & Svcs.	-16.0	Engineering & Constr.	-38.3
Oil Exploration & Prod.	-14.3	Gold Mining	-33.2
HMOs	-12.1	Shoes	-29.9

BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness	Price	1-month change
Camco International	70 7/16	-7 3/8
Merck	124 1/2	-8 1/4
Coca-Cola	83 3/8	-2 5/8
Wells Fargo	360	-2 15/16
Motorola	50 1/16	-3 13/16
Bristol-Myers Squibb	114 1/8	-4 5/16

Decline ahead? Stocks with most significant selling on price strength	Price	1-month change
Microsoft	112 1/4	4 13/16
WorldCom	52 1/4	5 3/16
Cisco Systems	96	4 3/16
Dell Computer	108 1/4	14 1/8
Applied Materials	32 13/16	2 1/2
Home Depot	43 3/8	1 1/16

REST RATES



omberg Financial Markets

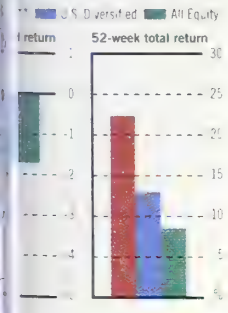
KEY RATES	Latest week %	Week ago %	Year ago %
MONEY MARKET FUNDS	5.10	5.10	5.17
90-DAY TREASURY BILLS	5.05	5.07	5.23
6-MONTH BANK CDS	5.06	5.06	5.18
1-YEAR TREASURY BILLS	5.35	5.37	5.43
10-YEAR TREASURY NOTES	5.52	5.46	6.04
30-YEAR TREASURY BONDS	5.77	5.68	6.33
LONG-TERM AA INDUSTRIALS	6.37	6.31	6.78
LONG-TERM BBB INDUSTRIALS	6.86	6.76	7.14
LONG-TERM AA TELEPHONES	6.75	6.66	7.04

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond		30-yr. bond	
	Latest week	Last week	Latest week	Last week
GENERAL OBLIGATIONS	4.43%	4.43%	4.98%	4.98%
PERCENT OF TREASURIES	80.29	81.26	86.41	87.67
TAXABLE EQUIVALENT	6.42	6.42	7.22	7.22
INSURED REVENUE BONDS	4.59	4.58	5.19	5.18
PERCENT OF TREASURIES	83.19	84.01	90.05	91.19
TAXABLE EQUIVALENT	6.65	6.64	7.52	7.51

AL FUNDS



ningstar, Inc.

EQUITY FUNDS

Leaders Four-week total return	%	Laggards Four-week total return	%
Matthews Korea I	21.0	Fidelity Sel. Energy Serv.	-20.5
American Heritage	18.4	Rydex Energy Svcs. Inv.	-19.3
Citizens Global Equity	7.2	Lighthouse Contrarian	-18.0
Warburg Japan Grth. Comm.	6.8	Guinness Mainland China	-18.0
Warburg Japan OTC Comm.	6.7	Crabbe Huson Special	-15.7

Leaders 52-week total return	%	Laggards 52-week total return	%
Transamerica Prem. Sm. Co.	62.4	Lexington Troika Russia	-68.4
Weitz Hickory	59.6	Lex. Crosby Sm. Cap Asia	-68.4
Transamerica Prem. Agg. Gr.	54.7	Montgomery Emerg. Asia R	-67.0
Flag Investors Communs. A	52.4	Guinness Flgt. Asia Sm. Cap	-66.4
Scudder Greater Europe Gr.	50.3	Morg. Stan. Inst. Asia Eq. A	-63.1

EQUITY FUND CATEGORIES

Leaders Four-week total return	%	Laggards Four-week total return	%
Latin America	3.9	Natural Resources	-9.4
Diversified Emerging Mkts.	2.7	Small-cap Blend	-5.8
Europe	2.1	Small-cap Value	-5.7
Japan	1.6	Small-cap Growth	-5.5
Foreign	1.6	Real Estate	-4.9

Leaders 52-week total return	%	Laggards 52-week total return	%
Communications	32.6	Pacific/Asia ex-Japan	-54.4
Europe	29.3	Diversified Pacific/Asia	-42.3
Financial	25.8	Precious Metals	-35.3
Utilities	23.3	Diversified Emerging Mkts.	-33.0
Large-cap Growth	22.5	Japan	-25.4

as of market close Wednesday, July 29, 1998, unless otherwise indicated. Industry de S&P 500 companies only. Fundamentals, technical indicators, Bloomberg money flow analysis, and mutual fund returns are as of July 28. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

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FINE-TUNING TOMORROW'S MARKET

The financial-services industry faces dramatic upheaval. New cybermarkets that trade equities are eating the lunch of the Wall Street middlemen who have grown fat on fees from traditional markets. New technology is turning stock trading into a commodity business (page 66). New systems can, for example, match thousands of buy and sell orders for stocks in nanoseconds—and far cheaper than people can.

Ordinary investors are gung-ho. Trading stocks on the Net through discount brokers is becoming old hat. Electronic investors want their own, brokerless, direct access to stock market trading systems. Small investors will get better prices and cheaper deals. Meanwhile, markets abroad, such as London and Frankfurt, are racing to lure business with state-of-the-art technology that could expand global investing.

Gloomsters might argue that the new possibilities for fast-paced trading will make stock markets more volatile. On a computer keyboard, after all, the panic button is just another keystroke. The Securities & Exchange Commission isn't worried. It insists that rules for existing markets during turbulent trading also must apply to cybermarkets. It is imposing some specific technical conditions on the fledgling markets, such as requiring that they have enough capacity to handle surges in activity. Otherwise, the SEC is rightly encouraging experiments without imposing onerous extra rules.

The trouble with the new systems is that they may tempt investors to trade before doing adequate research. Low-cost stock trading is great, but however cheap it becomes, it won't offset lousy investments. Even savvy investors are more likely to foul up if they don't do their homework. Financial information and advice is available on the Internet. Investors need to find what's solid and use it before they leap.

Wall Street has only itself to blame for its clients' unwillingness to pay high commissions for the advice that flows from traditional brokers. Many investors feel that these brokers provide endless buy recommendations—but little clear advice on when to sell. And many clients feel they're being palmed off with one-size-fits-all advice, despite all the promises to the contrary. Traditional brokers can win back investors with better advice. But wherever investors trade, the hope is that new competition will force the securities industry to provide guidance worth paying for.

A NEW ROLE FOR CHINA'S ARMY

President Jiang Zemin is getting bolder by the day. Now, he has ordered the People's Liberation Army to get out of business and back into the barracks by divesting thousands of commercial companies it owns. Given the military's clout in China's political system, it's a significant move, and
portant measure of just how committed Beijing's lea
may now be to economic reform (page 36).

The PLA's moonlighting accounts for only about
sales in the economy. But the military is far more tha
tent symbolic target. Some of its activities, such as smu
have become destabilizing and a real menace to the ec
Provided the soldiers obey orders, China can move
closer to building a civil society in which the rule
prevails and a civilian government really rules.

The reassertion of civilian control over the militar
make it easier for the West to deal with China, too.
generals, for instance, should now be less able to ru
own foreign policy by supplying arms to terrorists an
ah states. China's application to join the World Trade
nization should also be simpler to negotiate as governm
volvement in the economy and in business assumes
acceptable pattern.

There's some downside to the change, though. Chi
have to pony up more cash for military budgets to mak
on the lost income. Besides, a PLA devoted full-time
diering will be a more effective fighting force, and p
more belligerent than it is now. That makes it doul
portant for China's leaders to keep control of the milita
abandon aggressive designs on its neighbors or anyo

MORE LAWSUITS WON'T CURE HMOS

Advocates of sweeping patient protection legislat
cluding President Clinton, say they want to rein i
aged-care health plans and keep medical decision-making
hands of physicians. So why the rush to bring in lawye

Lawsuits are the reason why congressional hopes
ing a patients' bill of rights are fading. Democrats
that patients must be able to sue their health maintena
ganization if the HMO denies coverage for treatmen
President says he would veto the House-passed HMO
cause the measure doesn't give patients that recours

But HMO patients will find the right to sue cold co
they're harmed because a treatment was denied. Wh
need is a quick appeals process, with independent med
viewers, to judge whether their insurer is justified in
a treatment. Such panels are better qualified than ju
weigh a therapy's value. Moreover, they can act whe
ment is needed, not after health is damaged or lives lo
the House and Senate GOP bills mandate just such a p

Advocates of the right to sue say few lawsuits will
be filed, because HMOs will act defensively by coverin
treatments. But the threat of suits against doctors
mainly to waste, such as unnecessary tests or surg
tended to rob plaintiffs' lawyers of arguments. Manag
can cut such waste and control costs. If Clinton wants
form, he should keep the lawyers out and bring appe
els in.

August 17

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BusinessWeek

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HOW WORRIED SHOULD YOU BE?

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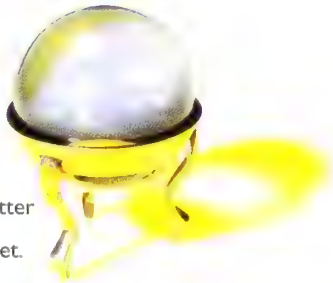
STORY #194:

My Wonderfully Predictable Future



LET'S just say you're the CEO of a large investment firm. You've got one eye on NASDAQ, one eye on Dow Jones and four hundred hands trying to grab the best stocks in both. You also know you have to face two hundred employees who want more money, better coffee, a parking place and notebooks that can handle a volatile market.

[*"Risk is okay in my line of work, but I sure don't need it from my notebooks,"*]

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[*"Now we all get something we can use more of around here: security,"*]

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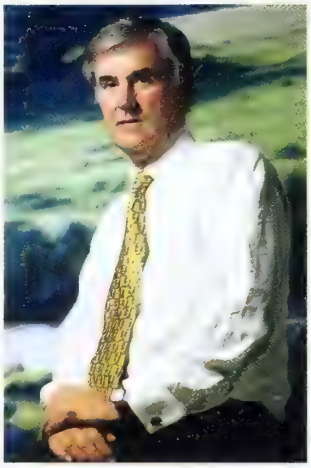

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Up Front

EDITED BY ROBERT McNATT

TALK SHOW "Say, kids, what time is it?"

—the catch phrase of the late Buffalo Bob Smith.

THE FEDS

HACK IF YOU LOVE JANET RENO

WANTED: HACKERS TO break into the Justice Dept. computer network. Got the skills? Good. Got a criminal record? Don't worry, that's not necessarily a roadblock to a new career.

Under a program known as Operation Get Cracking, the Justice Dept. and its contractor, SAIC Corp., sought members of the computer underground at late July's Def Con hackers' conference in Las Vegas. Amid a crowd rife with cyberpunks sporting body piercings, government officials sat through sessions about hacking while keeping an eye out for "people outstanding in their field," said one recruiter.

Attorney General Janet Reno has quietly committed $1 million to hire up to 16 hackers, says a source at Justice. Operation Get Cracking started after the agency's own Web site was vandalized. "If they can get into Web sites, what else can they get into?" asks one person involved in the operation.

The hackers will be testing the vulnerability of Justice networks. But while past computer crimes may be overlooked, the hackers will be closely monitored. Justice would neither confirm nor deny the existence of the operation. *Ira Sager*

NETWORKING

DING-DONG, THE DEAL IS DONE

FORGET GOLF. EXECS LOOKING to network their way into hot deals may want to take up the art of change ringing instead. That's how Laith Reynolds, CEO of Honolulu's tiny ProBio America, landed the commercial rights to a key scientific breakthrough, the cloning of adult mice.

A longtime supporter of the largely British practice of ringing church bells in ever-changing patterns, Reynolds organized the move of eight massive bells from Britain to St. Andrew's Episcopal cathedral in Honolulu. Anthony Perry, a change-ringer and British scientist, came to the University of Hawaii to work with Ryuzo Yanagimachi, the leader of the cloning team. The two met at St. Andrew's. Perry says he later told Reynolds about his cloning work, which surprised the world when announced on July 22.

ProBio is patenting the process, which could aid in creating animals which make drugs or organs suitable for human transplants. Ringing bells, Reynolds also met another scientist with whom he began another big project—developing decaffeinated-coffee plants. With that track record, perhaps this arcane art will soon find wider appeal. *John Carey*

CLONED *if not cute*

PLASTIC FANTASTIC

IS VISA'S ONLINE STRATEGY OFF-KEY?

THE GOVERNMENT PROBE OF the credit-card system is picking up a new trail. The Federal Trade Commission, according to industry consultants and lawyers, has begun looking at Visa's plans for its new debit card, called an "online card" even though it's for conventional store use. The agency is examining Visa's requirement that transactions with those cards go over Visa's electronic network rather than regional networks that charge merchants lower fees.

SOLD! *Who rings it up?*

With online cards, customers verify their identification with a PIN number, and the amount of their purchase is deducted instantly from their bank account. "C cards require a signatu take time to clear, check.

The FTC has alread looking whether and Maste have gor far by re retailers v cept their cards take thei cards, too say merch an antico tive practi has wou costing money. T declined to comment. I er, Todd Boyer, a spol for the Ohio attorney g said that a working g 11 state attorneys ge investigating Visa's de practices in tandem w feds. *Susan G*

MURPHY'S LAW

SPACE MAY HAVE A NASTY Y2K SURPRISE

IT'S THE YEAR 2000'S OTHER technological problem: space weather. While computers and the Y2K problem grab headlines, some scientists are worrying that natural phenomena in space could pose problems for scores of satellites in earth orbit at the turn of the century.

That's because extraordinary sunspot activity known as the solar max, which occurs every 11 years, will be back then—in time to coincide with the last year of the major Leonid showers, which bring storms of 5,000 meteorites an hour.

All in all, a nasty brew. Solar changes can expand the upper atmosphere, increasing the drag on satellites closest to earth and possibly knocking them out of orbit, causing them to burn up. Meteorites can hit birds and their plasma plumes can short-circuit electronics, says E. Clayton Mowry, director of the Satellite Industr

FLAP- *Biro*

What to do? Satell ten cylindrical in sha wing-like flat panels– duce the chances of b by turning their smal toward the storms. T also cut power to avo circuits. Although co private industry for catastrophe. But t Space Command is l guine. *Sta*

Morgan Stanley Dean Witter Dividend Growth Securities

★★★★

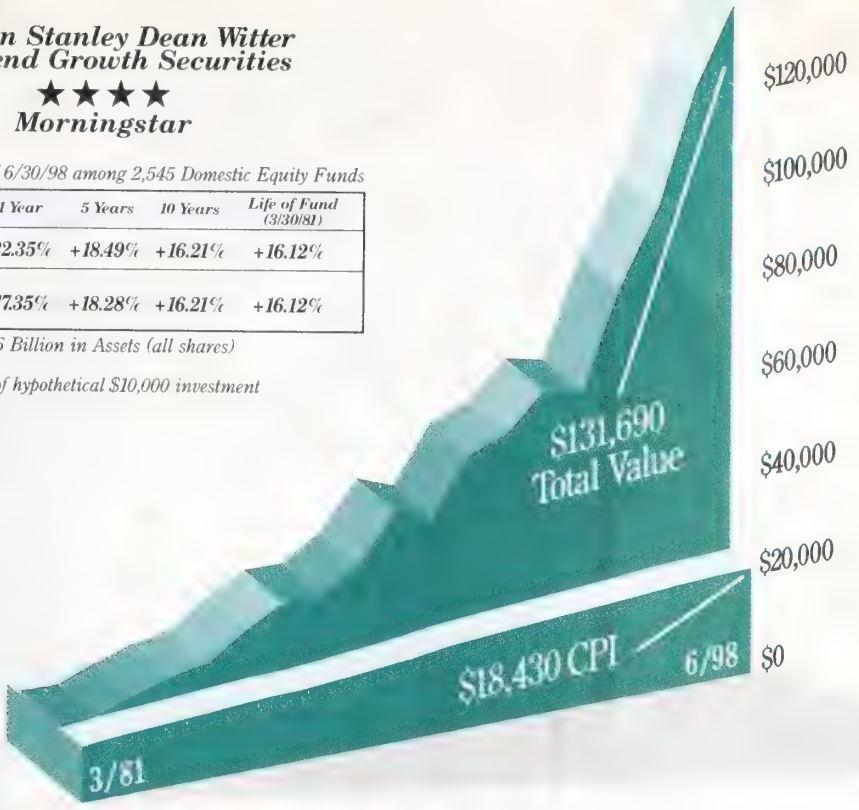
Morningstar

Overall Rating as of 6/30/98 among 2,545 Domestic Equity Funds

Class B As of 6/30/98	1 Year	5 Years	10 Years	Life of Fund (3/30/81)
Average Annual Total Returns*	+22.35%	+18.49%	+16.21%	+16.12%
SEC Standardized Avg Annual Total Returns**	+17.35%	+18.28%	+16.21%	+16.12%

$18.6 Billion in Assets (all shares)

Graph of hypothetical $10,000 investment



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illustrates a hypothetical $10,000 investment from March 30, 1981, (the Fund's inception date) through June 30, 1998, with dividends and capital gains reinvested at net asset es not reflect the effect of any sales charges. On July 28, 1997, the Fund introduced multiple classes of shares featuring various sales charge structures and ongoing fees. Most ares in the Fund were designated Class B shares, which are subject to a contingent deferred sales charge (CDSC) that starts at 5.00% and declines to zero after six years and / upon the sale of Fund shares. Investment return and principal will fluctuate so that your shares, when redeemed, may be worth more or less than their original purchase price mance is no guarantee of future results. Inflation is a measure of the change in the cost of living as monitored by the U.S. Bureau of Labor Statistics.

r proprietary ratings reflect historical risk-adjusted performance through June 30, 1998. Overall ratings are calculated from the Fund's 3-, 5- and 10-year average annual total ien applicable) in excess of 90-day Treasury bill returns (with appropriate fee adjustments) and a risk factor that reflects fund performance below 90-day T-bill returns. These subject to change each month. The top ten percent of the funds in an investment category receive 5 an Stanley Dean Witter Dividend Growth Securities Class B received 4 stars for 10 years (of 707 domestic equity funds), 5 years (of 1,462 funds) and 3 years (of 2,545 funds) for the B share class only; other share class ratings may vary.

nnual total returns reflect the actual performance of the Fund without taking sales charges into account.

dardized returns reflect the Fund's contingent deferred sales charge (Class B shares), which applies only if the shares were sold within six years of purchase.

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Up Front

FASHION FOLLIES

HAUTE COUTURE HITS THE PLAYGROUND

SCHOOL UNIFORMS AND fashion have traditionally clashed about as much as red and fuchsia. But high-end kidswear designers Esprit de Corps and DKNY Kids think uniforms can be trendy. So they're moving to cash in on that market as more and more public schools enact dress codes.

"No one said a school uniform has to be itchy, scratchy, and tired-looking," a DKNY spokeswoman says. "We can always improve on a classic concept." DKNY KIDS' items can pass for uniforms. And sales for Esprit's School Supplies line have tripled since last year, says Vice-President for Apparel Carrie Dawes.

DKNY: *Artist's concept*

No wonder: Districts nationwide are adopting uniforms—and New York, fashion's epicenter, will, too, in 1999. "School uniform makers have some new competition—the 'fashion-forward' companies," says Joanne Arbuckle, a professor at New York's Fashion Institute of Technology. For districts that already require, say, navy skirts and white shirts, designer togs fit the bill.

Parents will like the clothes' durability, and kids will go for top designers, says Arbuckle. And the prices? DKNY's white shirt, $30; skirt, $42. Uniforms were intended to stamp out fashion competition and cut parents' expenses. Looks like we've come full circle. *Tammy Reiss*

I-WAY PATROL

THE WEB FOR FREE? NOT SO FAST

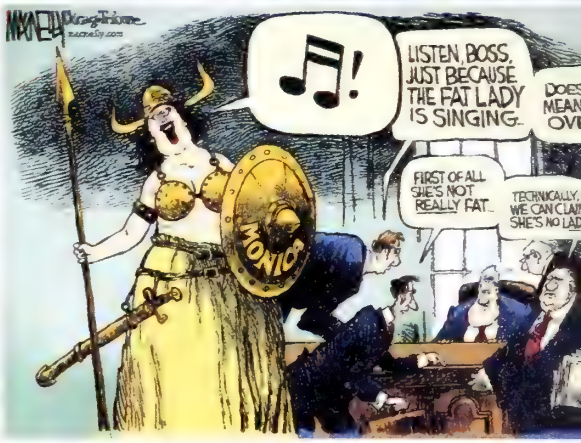
THE INTERNAL REVENUE Service bills itself as warmer and fuzzier these days, but thousands of Internet users in Lane County, Ore., may disagree. The tax agency is investigating the tax-exempt status of a group providing free and subsidized Internet access to the surrounding community. The outcome could affect 350 similar providers nationwide.

The IRS says providing this type of Internet access may be neither charitable nor educational, says Oregon Public Networking's technical manager, Shava Neerad. A decision on the audit, begun in June, is due within a year, she says. The IRS declined to comment, citing "classified taxpayer information" rules.

Public Networking, a nonprofit group, became tax-exempt in 1993. It uses fees from paying customers to provide free or subsidized access to 20,000 people—many of them low-income—in Eugene and elsewhere in the county. "We're like a public library," Neerad argues. In short, everyone has access.

Most tax-exempt Internet service providers work the same way. "Many people simply can't afford a commercial Internet service provider," Neerad says. Let's see what the "new IRS" thinks about that. *Tammy Reiss*

DRAWN & QUARTERED



RETAIL TALES

BIG GREEN FROM THE BROWNS

THE CLEVELAND BROWNS don't even exist. But the once and future NFL team has a fan base so wide it stretches clear to Fayetteville, N.C. That's home to M.J. Soffe Co., a family-held textile company that's enjoying a windfall from the demand for—would you believe?—Browns T-shirts.

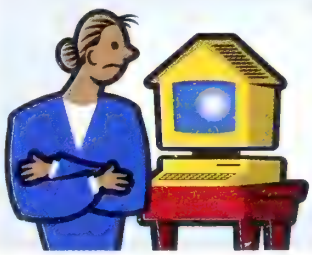
With the National Football League poised to replace the Browns team Art Modell shipped off to Baltimore in 1996, Pro Player, a division of Fruit of the Loom (FTL), won the rights to sell stuff with a Browns logo—Cleveland still owns. T-shirts hit Ohio stores i to such demand—$400 sales—that FTL ran ou ter Soffe, which ha brown T-shirts to the Army for 50 years.

"It was kind of a sh see that FTL would from us," says Wheeler, vice-pre for sal mark Even winte in brown are fl the shelves.

Sales could hit $1 lion by football seaso Pro Player. The exp Browns will be hard- to make the playof they're poised to ma NFL's top 10 for merc sales. *Lorraine*

THE BIG PICTURE

NESTING, THE OLD-FASHIONED WAY While 6 Americans call this a good time to buy a house, mos uneasy with the idea of handling mortgage paperwo the Internet. Asked if they'd use such an online ser neither Baby Boomers nor Gen Xers were enthusiastic.



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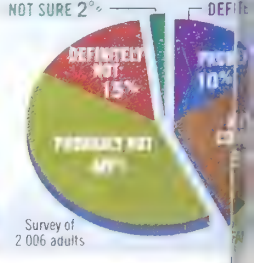

FOOTNOTES CEOs who worked while on family vacation last year: 98%; those who vow they won't do it again this year:

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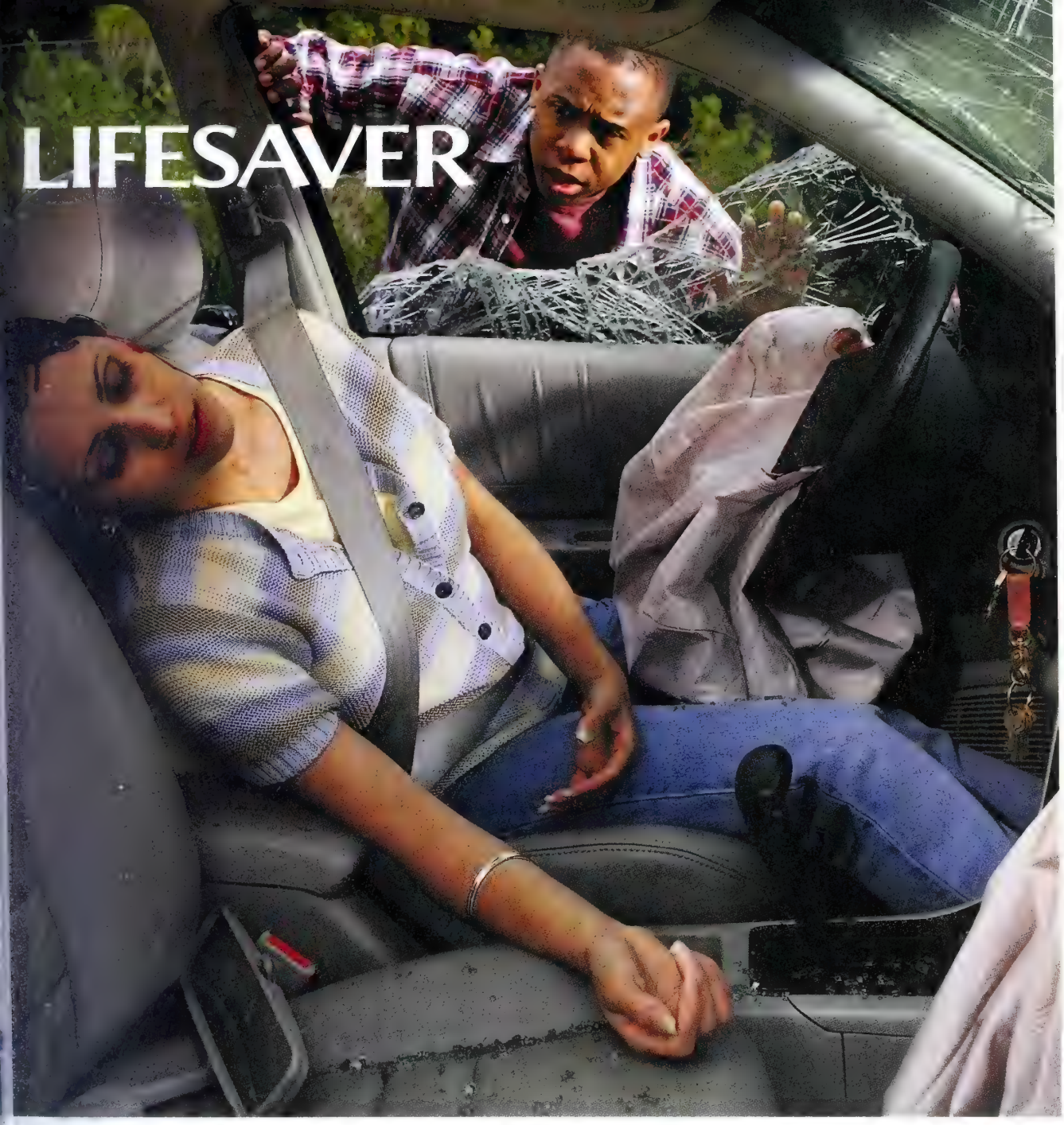

Would you know how to help?

year, thousands of drivers and passengers die in the few minutes after an auto collision. Many of these victims would survive if ne first people on the scene knew how to react in emergencies. How can *you* help an accident victim, even before treating injuries? **Turn off the ignitions of any wrecked cars to reduce the risk of fire.** This simple step could keep a bad collision from becoming much worse. Remember: Check for fire, downed wires or spilled gasoline before getting too close to a wreck. And *never* move an injured driver to get to his keys. Learn more emergency tips in the "Crash Course" book, free from Shell. Pick one up at your nearest Shell station or contact us at www.countonshell.com or call 1-800 376 0200.

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Readers Report

AHEAD OF THE CURVE ON BIOTECH BODIES

I am writing to congratulate you on your excellent Cover Story, "Biotech Bodies" (July 27). Certainly, the maturation of tissue technology has outpaced the awareness of the public, the medical establishment, and the regulatory agencies. The consciousness of the medical and regulatory communities concerning the immediate utility of these tissue technologies should be appropriately heightened by this review.

Frederick O. Cope
Chief Executive Officer
Hy-Gene Inc.
Ventura, Calif.

A BRIGHTER WAY TO POWER AMERICA?

De'Ann Weimer's Commentary makes a lot of sense ("Don't be shocked by surges in the price of power," News: Analysis & Commentary, July 27). Stepping in to "re-regulate" electric power sales would be a mistake. These sales are already regulated by the Federal Energy Regulatory Commission. High prices are not a signal that a market does not work: Just the opposite. The call for independent system operators (ISOs) may be premature—to the extent that ISOs themselves have not proved to be better operators than the current ones. A better choice may be to permit third parties to build and operate new electric transmission lines, possibly under new federal permits. This would require new federal legislation, but such permission has always existed for interstate natural-gas pipelines.

Branko Terzic
President & CEO
Yankee Energy System Inc.
Meriden, Conn.

You have it exactly right. Commonwealth Edison Co. has historically maintained at least a 15% standby reserve in its generating plants, primarily to handle the summer peak. Now, it wants to sell its coal-fired reserve plants. If recent statements by new CEO [Joh Rowe are to believed, ComEd also like to find a way to sell it clear generating plants. Absent part of its generation, a restruc and shrunken ComEd could then a predictable and tidy profit from ation of its substation and transmi line distribution network. ComEd's ly variable costs of purchased p would be passed through to consu (à la present practices of loca pipeline utilities). Electric rates be destabilized and would undoub increase. The little control that Ch area consumers now have over the ity and reliability of ComEd el service would vanish.

Donald L.
Lake Fores

BASH TAX LAWS, NOT TAX COLLECTORS

Although criticizing the Internal enue Service is in vogue, Larry I Commentary "Business expenses IRS uses a crooked yardstick" (Fi July 27) wastes a page of BUS WEEK to do so. If he were interes taking a positive step rather tha wailing about the sad state of affa would be urging a new tax syst decoupling of taxes and social eng ing. That is where the fault lie no solution will be effective unt present mess of statutes and r tions are discarded and replac something simple—for example, tional sales tax or a flat tax.

E. C. Vander
Dubuque

DRIVERS AIM TO KEEP ON TRUCKIN'

When the top-selling vehicles in 1998 are all trucks—and only from General Motors Corp.—th obvious that most American d don't intend to be looked dow by their truck-driving neighbors longer ("GM: It's time to face t ture," News: Analysis & Commu

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RECTIONS & CLARIFICATIONS

ng seismic waves in the oil field" (The ration, July 27) should have said that y, Petroleum Geo-Services acquired the ng production operations of Awilco ASA, tlantic Power Group. Also, President e Bruheim's former position was head smic-drilling operations.

7). We are craving vehicles that ler, more massive, more powerful, utilitarian, and safer than auto- es. Who would have thought a ago that even Lincoln would add selling truck to its lineup? Until cognizes Americans' infatuation ar-like trucks, its other models o the way of the convertible.

Ted Janusz
Hilliard, Ohio

E SAM IS OCK ANALYST

ial Security: And now for the lib- t" (News: Analysis & Commen- ly 20) was quite interesting. I'm see that the government shows t in finding a way to replenish cial Security system. The only n is: Will people trust the gov- it to invest their money in the arket? To me, it seems the gov- t is taking a huge risk with peo- ney. The government is going to a committee to vote on what to buy. What if the committee a bad investment? The risk may ll, but it is crucial.

see it, if people want to invest in k market, then they are better g it themselves. People will have dom and authority to choose and n different stocks and bonds. At e money will be going into the al's bank account. If the govern- mbles with the people's money s it, then the government will be e shape than it is now. The gov- should look in other places to Social Security.

Hetal Parmar
Agoura Hills, Calif.

DIANS THE BUCKEYES

r "Teams worth cheering for" nt, July 27), the winners are Jacobs (owner) and the Cleve- ians! They received lavish sub- ax money) and vast infrastruc- enditures from city revenue. al tax money comes from the es tax on liquor and cigarettes s). Were these hidden subsi- n taken into consideration by the United Sports Fans of America?

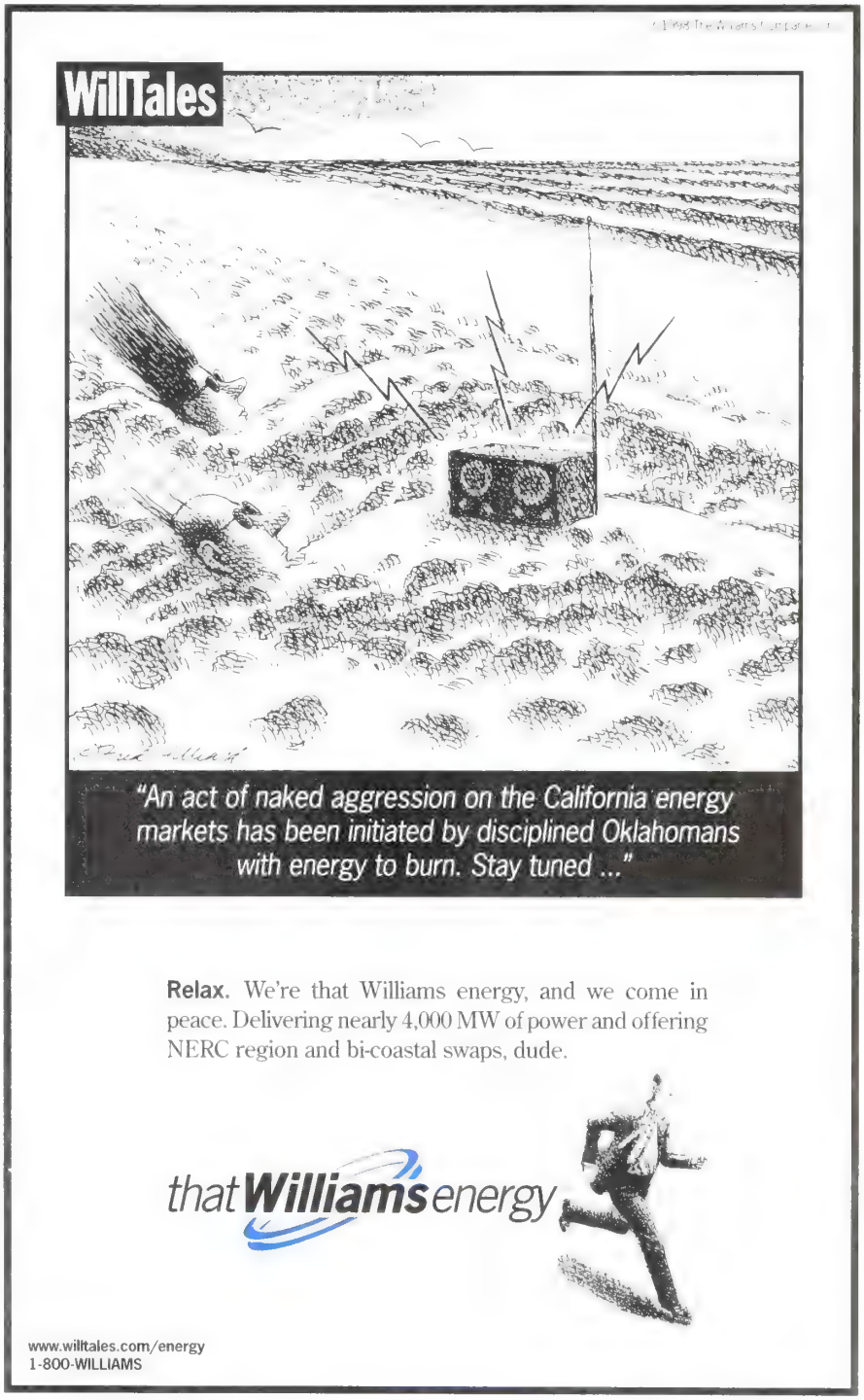
The losers are the citizens of northeast Ohio. Their taxes are being used to make a professional sports owner richer—along with some very highly paid Tribe players. Saying that a family of four can eat for $30 ($7.50 each) is like saying you can travel in Europe on $5 a day. What did the family eat, anyway? Day-old pizza, or was it the room-temperature hot dogs?

Bernard Baltic
Lakewood, Ohio

PRICES MAY BE STABLE, BUT ADD-ON FEES ARE SOARING

"That surprisingly low inflation rate" (Editorials, July 27) succumbs to the same naïveté that affects public-sector economists. I don't even need to walk out my door to find devastating inflation. It's hidden in the plethora of "fees" to which all American consumers are being subjected.

Have you ordered any merchandise



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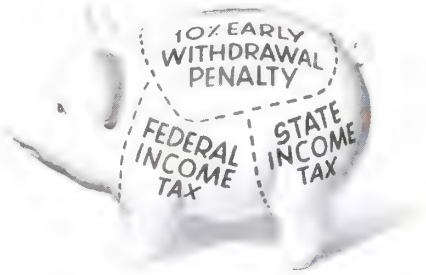

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Readers Report

by mail recently? Perhaps the price[s] the same as last year, but the "han[dl]ing fee" certainly wasn't. Have you [re]chased a ticket for an airline flight [or] concert lately? Take a second loo[k] the fees levied on top of the ticket p[rice]. Ditto for your cable-TV and telep[hone] bills. These are typical examples fr[om] much longer list of fee-added prod[ucts] and services that Americans purc[hase] on a routine, recurring basis. An[d] though car rentals don't fall into [the] mainstream of consumer expenditu[res] they set a new low for slap-in-the[-face] addition of fees, sometimes as mu[ch] 40% of the basic rental cost.

If we are truly going to track i[nfla]tion, we need to take add-on fees i[nto] our calculations. When you assess h[ow] consumers must shell out, it's only [the] bottom line that really counts.

Thomas J. Ke[lly]
De[troit]

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ATHER OF SPIN
d L. Bernays & The Birth of Public Relations
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HE HIGH PRIEST F HYPE

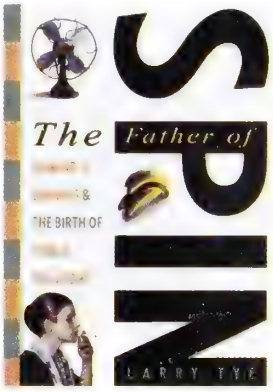
friend in corporate public relations and I like to debate the merits of journalism vs. PR. Re-, he conceded that his profession odious." But then, he rationalized, ln't know anyone in business, or dism for that matter, who played ight—so it was O. K.

en the press scandals of late—the Monica travesties to the *ime* nerve-gas misfire—it might ard to refute that sentiment. But t is, for journalists, truthfulness s the objective, even if it's not al-attained. In PR, truthfulness is even on the radar screen as a except perhaps as a convenient or legal consideration. Hence the istrust between these professions e, lamentably, joined at the hip.

tension informs and occasionally nines *Boston Globe* reporter Tye's biography of Edward L. 's, *The Father of Spin*. Bernays, ed three years ago at 103, was a nenon who not only pulled off PR legerdemain for more than a ntury but who also wrote the n PR theory and practice. One of blems with *The Father of Spin* is e author can't help but admire s' achievements—but in his quest ctivity, Tye seems compelled to elentlessly on whether the ac-hments were real or merely he effect is dizzying. Bernays ll have been a hypocrite and randizer, as Tye proves repeat-d it's important—though hardly —to learn that. But readers are y equally interested in seeing and his world come alive. Dis-ngly, though Tye culled many s from Bernays' voluminous pri-ers, he doesn't synthesize them tly to make that happen.

ook's organization creates prob-n the start. Tye doesn't recount Bernays' background until midway through. The information would have enriched the business stories of the book's first half. Similarly, Bernays' relationship with his uncle Sigmund Freud isn't described until even later, though Freud was clearly an inspiration.

One contemporary observed that while Freud "is interested in releasing the pent-up libido of the individual, his American nephew is engaged in releasing (and directing) the suppressed desires of the crowd." Bernays wrote about the malleability of people in large groups, the herd instinct that causes them to follow so-called opinion leaders, and how to create a consensus by analyzing how people think and then manipulating the symbols that inspire them.



Always practical, Bernays developed an arsenal of stratagems: flooding the media with an array of experts and opinion leaders, creating pseudo-trade associations to disseminate information favorable to a behind-the-scenes client, marrying PR campaigns to the purported public good, and staging ersatz news events. His method was to pinpoint as many constituencies as possible and work on each until he achieved the desired effect.

Tye relates, for example, how in 1928 American Tobacco Co. asked Bernays to help expand its customer base to women. Rather than promote the qualities of the brand, Bernays sought to alter the image of smoking in women's minds. He staged his own Easter Parade along New York's Fifth Avenue, with 10 socialites smoking what Bernays liked to call "torches of freedom." He enlisted a reputable doctor to testify that smoking was healthy, persuaded hotel restaurants to put cigarettes on the menu alongside desserts, recruited a willing editor from *House & Garden* to create menus suggesting cigarettes instead of dessert, and even persuaded dance instructor Arthur Murray to say that women should smoke rather than overeat and embarrass themselves on the dance floor.

These anecdotes are fun, but they tease rather than instruct—for exactly how Bernays managed much of this is left to our imaginations. Tye too frequently presents Bernays' handiwork as a fait accompli. I wondered which hotel restaurants complied, how many there were, and why they went along. Did Bernays pay them? And why only hotel restaurants? Tye's research seems haphazard—and to borrow from an old joke, the portions are too small.

Tye tries hard to take an objective measure of the self-promoting Bernays. But wearyingly, he indulges in a number of "on the one hand, on the other hand" arguments that beg for tighter editing and a firmer authorial voice. In the last chapter, for example—archly titled "A Question of Paternity"—Tye attempts to assess whether Bernays can legitimately be called the "father of PR." The author's rapid-fire production of quotes on the issue from at least 45 sources displays an ability to search databases but no willingness to distill the data. Not having synthesized what he has found, he can't be properly critical. As a reader, I want to understand the issues, but I also want an authoritative voice resolving them in a credible way.

In his preface, Tye writes that he wants to use "Bernays' life as a prism to understand the evolution of the craft of public relations and how it came to play such a critical—and sometimes insidious—role in American life." Tye's intentions are on target. He mentions that he was given a year's leave for writing and research. If he'd had more time—enough, that is, to think things through—maybe he could have met his goals.

BY MARILYN HARRIS

Harris, a former BUSINESS WEEK Connecticut bureau chief, has worked in PR.

TYE SERVES UP GREAT ANECDOTES, BUT BERNAYS AND HIS WORLD NEVER COME ALIVE

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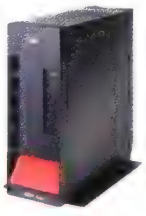

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BY G. DAVID WALLACE

WIN98: A GUIDE TO THE GUIDES

You'll probably need a book to negotiate this software. Here are three to consider

Not so long ago, an essential feature of any computer program was the extensive manual that came with the software. As software has grown in size, however, the manuals have shrunk. These days, the manual is little more than installation instructions. When you bump into a problem or can't remember that sequence of clicks that gets you where you want to go, you go to an electronic help file on your computer.

I miss those hefty manuals, even if they were sometimes written in technical jargon and made it hard to find the tip I needed. I particularly miss them with Windows 98. Win98 not only runs your computer but also provides a choice of no-nonsense word processors, a variety of connections to the Internet, a toolbox for computer tune-ups, and software for creating your own Web page—not to mention a clutch of games. Everybody seems to figure out solitaire with no problem, but trying to use all that other stuff is a challenge. The 129-page manual that came with my Win98 upgrade just scratches the surface. Using the on-screen help files often leaves me at step No. 4 in some process, trying to remember whether I got step No. 2 right. I need a book.

Picking one that I also could recommend to other people was harder than I thought. You could fill an entire store with computer books. Virtually every software program has a book for Dummies, a book for Idiots, a book for Busy People, a book for system administrators—just about anyone publishers can imagine. I started by narrowing my search to books for nontechnical people who have used earlier PC operating systems but are just starting with Win98. I wanted a book with clear explanations, plenty of graphics, and a comprehensive index. Most of the time, I use a book to solve a problem I've encountered—so I need an index to get me where I need to go fast.

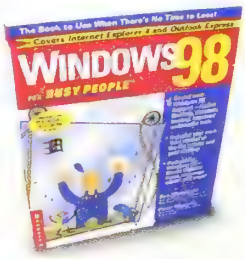
I scanned several books to select three that I thought were worth a close look. Books in the "Dummies" series are typically the best-sellers among the various computer categories, so I included *Windows 98 for Dummies* from IDG Books Worldwide. The comparable Microsoft Press series is "At a Glance," and I found *Microsoft Windows 98 at a Glance* a solid example. No. 3 on my short list was *Windows 98 for Busy People* from Osborne, which, like BUSINESS WEEK, is a unit of The McGraw-Hill Companies.

Dummies' virtues quickly become clear. It's the most fun you'll have with a computer book. You can learn to cheat at solitaire or head to such sections as "Please don't read this!" and "Ten atrocious acronyms." When you hit the inevitable snarls in W this book feels your pain prescribes a chuckle.

Unfortunately, I found book less helpful than other two. For examp big, irreversible dec when you install Win9 whether to use a new compression scheme c FAT32, for file allocation t It lets you get more stu your hard drive, particu if it is larger than 1 giga But as the manual with software points out br choosing the FAT32 forma cause problems, such messing up the feature puts some computers suspended animation they're not in use. *Dum* provides no guidance simply refers you to an book in the series.

SHORTCUTS. Microsoft's surprised me. I expecte overly rosy view of the ware's capabilities and cause of its layout, sketchy information. Bu book's advice was stra forward, and the combin of graphics and snippe information turned out quite meaty. The way book is set up, you can times thumb throug pages to find what you fast without even goi the index. (All three of books have good ind incidentally.)

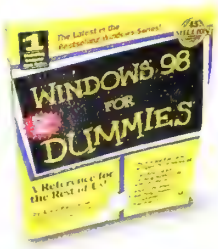
My favorite of the is the *Busy People* bo is well-organized, wit ferent sections that ca you a quick overview deeper. It's the only ful book of the three, makes the graphics inviting and useful. It good job of highlightin portant shortcuts and tions. In most cases, i vides more complete than the other two. plan to become a power user, you will e ally outgrow all thr these books. But I'm ing *Windows 98 for People* my faithful co ing companion.



Windows 98 By the Book

WINDOWS 98 FOR BUSY PEOPLE Osborne, 318 pp, $19.99. The best of this trio. Clear and substantial explanations with colorful graphics, useful tips. Weak Web site, **www.osborne.com**, is strictly for buying books.

WINDOWS 98 AT A GLANCE Microsoft Press, 320 pp, $13.59. Solid, basic. So-so graphics. Web site, **mspress.microsoft.com**, kind of skimpy, with most information on company's Win98 site, which all registered software buyers can use anyway.



WINDOWS 98 FOR DUMMIES IDG Books Worldwide, 382 pp, $15.99. Conversational and concise, too much so at times. More chuckles per page than any of the Win98 guides. Useful Web site, **www.dummies.com**, with chat sessions and additional tips.

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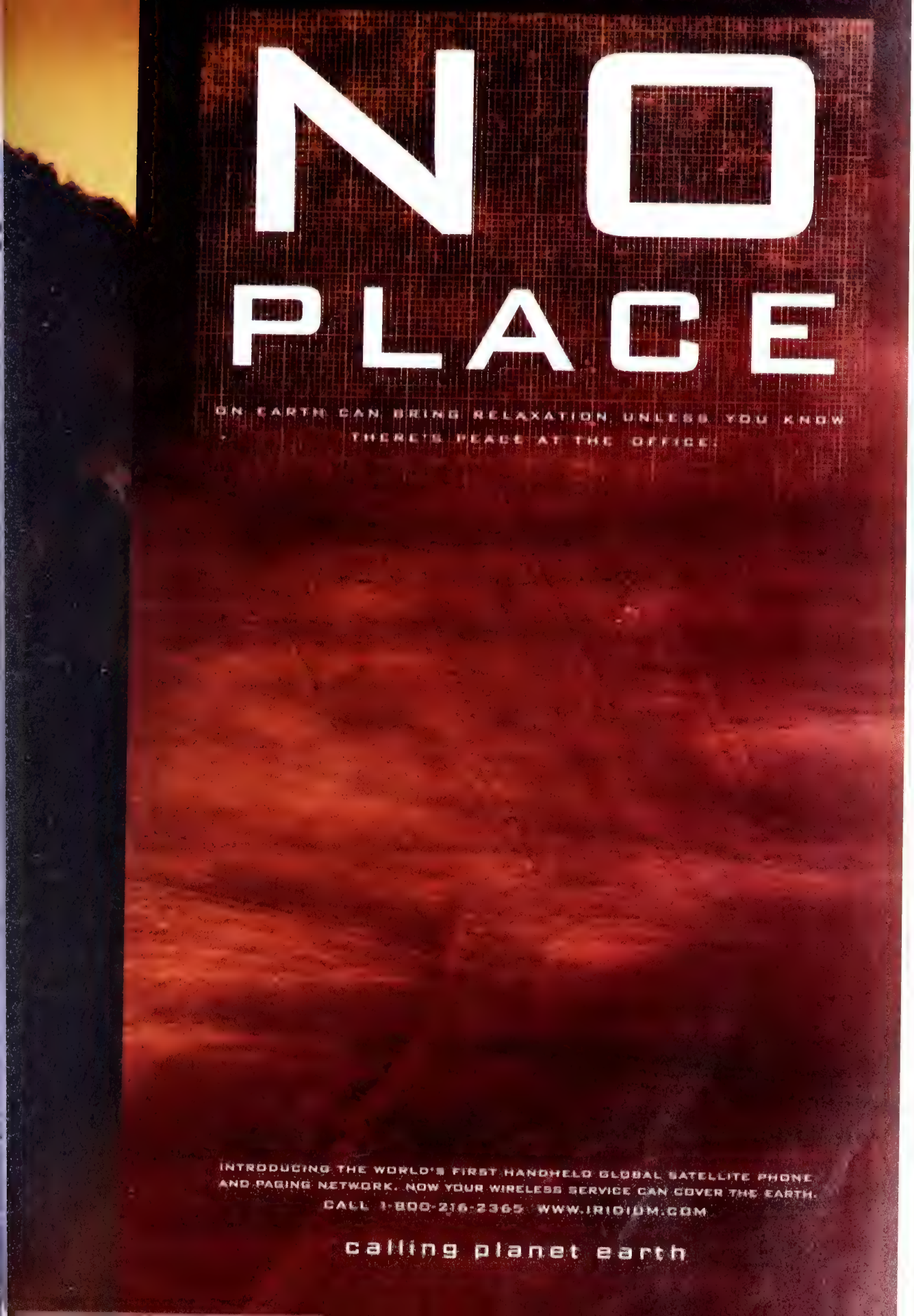
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BY ROBERT J. BARRO

WHY THE ANTITRUST COPS SHOULD LAY OFF HIGH TECH

FAST-PACED: Trustbusters are forgetting how fluid the industry is—and so are the rivals of Intel and Microsoft, who should quit whining

Robert J. Barro is a professor of economics at Harvard University and a senior fellow of the Hoover Institution (rjbweek@harvard.edu).

In capitalism, which works better than any other known economic system, the reward for delivering good products at low costs is large profits. To secure these profits, businesses typically have to innovate in ways that lead temporarily to monopoly power over new products or methods of production. In a well-functioning free enterprise system, businesses must be allowed to enjoy these profits. This incentive principle is recognized, for instance, in the patent system for inventions. But the idea has much broader applications, and the government should not step in to limit profits at the first sign of monopoly power.

Yet sometimes, as with IBM in the past and now Microsoft Corp. and Intel Corp., the government's response to business success is an antitrust action. The usual rationale is that such action promotes competition, which leads to lower prices and faster innovation. As a rule, however, it is a suspect policy that tries to promote future innovation by limiting the reward for past successes. The irony is that no sector has ever experienced price declines and product improvements as fast as the computer industry. So the government's argument—that if something is not done to limit monopoly power, innovation will be constrained, and future prices will be excessive—is entirely hypothetical.

The Federal Trade Commission's action against Intel is foolish because maintaining market power in computer chips depends on continued innovation at a rapid pace. Even with these innovations, Intel is being seriously challenged by competitors at the low and high ends of the market. The complaint about Microsoft's Office software by 20 state attorneys general is similarly unconvincing. This part of the states' antitrust action recently was dropped in response to a June 23 ruling by a federal appeals court in Washington, D. C. The court undercut much of the Justice Dept.'s complaint against Microsoft by saying that the government had no useful role to play in software design.

The interesting parts of the Microsoft case revolve around two areas: the importance of operating systems and the potential extension of a dominant operating system to the Internet. These areas involve networks and industry standards, which feature important economies of scale. If the industry were static, these elements might allow a single large company to capture long-term monopoly p er—and that would raise legitimate antitr concerns.

However, the remarkable fluidity of computer business often has been noted. one has any idea about the form or role of erating systems five or 10 years from n For instance, Sun Microsystems Inc. is pu ing an Internet-based network system a platform that eventually may overthrow Windows type of operating system. Gi this dynamism, any remedy that the gove ment could propose for today's marketpl such as insisting that Microsoft's Wind system provide equal access to Netsc Communications Corp.'s Web browser or tus Development Corp.'s Smart Suite, w hardly convey any real benefits to consum

THE IBM LESSON. In fact, the government's tervention could be influential only if it lo in the industry's current structure by venting the innovations that public polic supposed to promote. Clearly, any atte to break up Microsoft (an idea the gov ment has lacked the temerity to prop would cause far more harm than good. I at what happened in the government's trust intervention with IBM. The main be ciaries of the government's case were many lawyers, economists, and other adv who received handsome fees for their eff Interestingly, the rate of innovation at time was dramatically slower than it is

A sad sidelight in the Microsoft case is cooperation of its competitors, Netscape, and Oracle Corp., with the government. might have expected these robust innov to rise above the category of whiner c rations, as represented in the pas Chrysler Corp. (in its pursuit of a p bailout in 1979) and Archer Daniels Mi (in its persistent lobbying for subsidi ethanol). But a market-oriented econ such as myself ought not expect or eve sire corporations to ignore private pro further the public interest. The real pr is that whining can sometimes be profi because the political process makes it so remedy requires a shift in public polici provide less reward for whining.

The bottom line is that the best poli the government in the computer indus to stay out of it. Come to think of it, t the best policy for the government at times in most places.

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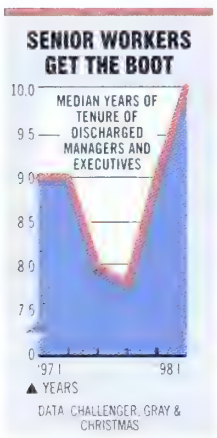
BY MIKE McNAMEE

FIRST HIRED, FIRST FIRED?

Job cuts for older staff have risen

The economy is strong, and newspapers are full of help-wanted ads. But prosperity doesn't guarantee security for workers with the most seniority.

Half the job-hunters counseled in the second quarter by outplacement specialists Challenger, Gray & Christmas Inc. had spent 10 years or more in their last job. That's the longest since the recessionary fourth quarter of 1990, when the median span was 13 years.



Severance pay, too, shows it's veteran workers who get the ax: Challenger Gray says median severance was 25 weeks' pay in the second quarter. In 1996, the median was 13 weeks.

Challenger Gray counts workers who accepted buyout offers as "discharged." The new figures "suggest that companies are targeting veteran workers for their layoffs and buyouts," says John A. Challenger, executive vice-president. "We're seeing more focus on productivity and performance." Managers with high seniority and pay are vulnerable if they can't outperform lower-cost juniors.

Challenger says U.S. companies announced cuts of 50,774 jobs in July and 321,217 jobs since Jan. 1—just behind the pace of 1993, the worst this decade.

STEVE FORBES, MUNI SLAYER

His tax plan rattled bond markets

Steve Forbes's 1996 campaign for the Republican Presidential nomination didn't last long. But that quest—and Forbes's call for a 17% flat-rate tax system—rattled the municipal bond market.

The flat-tax scheme would exempt income from investments from tax—giving all assets the tax-free status that munis now enjoy. If bond traders took the flat tax's chances seriously, the spread between taxable and tax-exempt bonds should have shrunk when flat-tax proponents were on the rise.

And so it did. In a paper published by the National Bureau of Economic Research, Joel B. Slemrod and Timothy Greimel of the University of Michigan checked 5-year and 30-year bond spreads against Forbes's political strength. During his campaign—from Jan. 12 to Mar. 14, 1996—the spread on 5-year bonds shrank whenever the value of Forbes's "shares" rose on the Iowa Electronic Markets, a stock market at the University of Iowa that lets investors bet on politicians' prospects. The spread for 30-year bonds didn't react as strongly—a sign, perhaps, that muni investors figured that a flat tax wouldn't last long. If Forbes runs again, muni investors had better duck.

A FAIRER SHARE FOR WOMEN

How to raise retirement income

Two scholars writing for the libertarian Cato Institute aimed to study how women would fare in a Social Security system based on private savings accounts. Instead, they found themselves in a debate over "earnings sharing"—what would happen if spouses had to share credit for each other's earnings.

Diverting 10 percentage points of the 12.4% Social Security payroll tax into private accounts would boost the retirement income of nearly all women, say Ekaterina Shirley and Peter Spiegler of Harvard University's John F. Kennedy School of Government. For women with interrupted work histories who spend their whole careers in a privatized system, lifetime retirement income would rise 47% for single women and up to 157% for married women.

But that effect has nothing to do with privatization and everything to do with earnings sharing, critics contend. Under Shirley and Spiegler's design, half of each spouse's Social Security contributions are deposited in the other spouse's account. Earnings sharing "tends to reallocate benefits toward the low earner in a couple, which is usually the woman," says Anna M. Rappaport, an executive at benefits consultant William M. Mercer Inc. and president of the Society of Actuaries. That accounts for much of the gain Cato found, she says.

Shirley and Spiegler acknowledge the impact of earnings sharing. But gains for single women, who don't be from a husband's earnings, show investing Social Security contributio private retirement accounts will help women, they say.

JOB VIOLENCE: A GLOBAL SURVE

France leads in workplace assa

Headlines in the U.S. are full of lence at work. But in a gl analysis of on-the-job violence, th ternational Labor Organization finds that American workers are likely to be assaulted than their terparts in most of Western Euro

In the U.S., 1% of men and 4.2 women reported job assaults in In France, 11.2% of men and 8.9 women reported assaults. For Western Europe, assaults were rep by 3.6% of men and women. For Austria seems to be the safest place. For women, Hungary: no as reported in either case. The ILO tions that the figures are based o ported crimes—and standards fo porting vary from country to cour

About 15 American workers are dered on the job each week. But f them are victims of enraged co-wo who "go postal." Around 80% of place homicides occur during robb or other crimes. Taxi drivers, polic tel clerks, and gas-station atten are the most likely victims. Currer former co-workers are responsib 5% of murders.

WHERE THE DANGER LURKS

Share of workers who report attacks on the job

	MEN	W
FRANCE	11.2%	
ROMANIA	8.7	
ARGENTINA	6.1	1
SWITZERLAND	4.3	
CANADA	3.9	
NETHERLANDS	3.6	
ENGLAND	3.2	
U.S.	1.0	
SOUTH AFRICA	0.7	
RUSSIA	0.4	
INDONESIA	0.3	
AUSTRIA	0.0	

DATA: INTERNATIONAL LABOR ORGANIZATION

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MES C. COOPER & KATHLEEN MADIGAN

ROUBLE ON WALL STREET MAY EAN TROUBLE ON MAIN STREET

ere stock prices go, consumer and business spending is likely to follow

J.S. ECONOMY How intertwined are Wall Street and U.S. economic h? Until recently, not very much. Even the 1987 t plunge did not derail the economy. Now, the 31 report on gross domestic product offers a ng new take on that question. The data strongly that the stock market's incredible run is a strong ce on the robust pace of U.S. spending. So what is when the market stumbles?

question is becoming increasingly urgent. The ones industrial average plummeted 299 points on , bringing the slide since the July 17 peak to 851 or a drop of 9.1%. Investors are taking a second those earlier, rosy profit projections made dim- Asia and rising labor costs.

The GDP report shows that the past surge in stock prices, along with low long-term interest rates, has created accommodative conditions that are exerting an unprecedented upward force on this economy. Consumer spending, for example, is far outstripping the excellent performance of household income (chart), suggesting that consumers are financing rchases out of their stock-market gains (page 36). siness outlays for new equipment continue to even as profits go nowhere. That's because busi- are using cheap equity and debt financing.

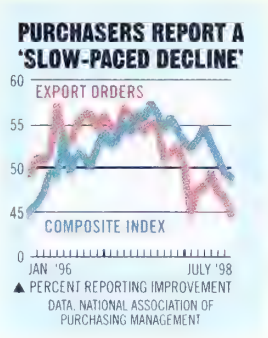
pshot is that the outlook will be increasingly ned by Wall Street, not Main Street. And there- he danger: A reversal of those conditions might the biggest threat to this seven-year expansion.

NO MISTAKE, the GDP report was surprisingly The economy grew a higher-than-expected 1.4% econd quarter, after a boffo 5.5% performance in t quarter. The data dispelled loose recession t was starting to crop up because they showed elenting domestic spending continued to over- substantial Asian impact. In fact, if it were not widening trade gap, which robbed three per- points from GDP growth in the first half, the would have grown 6% in the first half.

sian hit, which has been concentrated in U.S. turing, continued in July, according to the nation's purchasing managers. Their composite index of industrial activity dipped to 49.1%, down from 49.6% in June, and export orders remained weak (chart). These purchasers, however, said that the auto strike also curtailed output to some extent.

The GDP report also showed that inventories are not a problem. First-quarter inventory growth was revised substantially downward, from $105 billion to $91 billion, and then the pace slowed sharply to a manageable $45 billion last quarter. The small gain in stock levels suggests that any inventory adjustment was almost totally completed in the second quarter, clearing the way for output growth in the second half.

BEAR IN MIND, THOUGH, that strong domestic demand was responsible for quickly eliminating the excessive inventory buildup. And it is consumer spending and business outlays that have become extremely dependent on Wall Street's bounty, making those sectors the most vulnerable to market shifts.



Clearly, domestic demand was exceptionally healthy in the first half. Inflation-adjusted consumer spending rose at an annual rate of 5.8% in the second quarter, following a 6.1% advance in the first quarter. Back-to-back gains like that are phenomenal this late in a business cycle, when the pent-up demand that follows a recession has been sated. In fact, spending in the past year has grown 5.2%, the fastest four-quarter pace in 13 years.

By comparison, real aftertax incomes have grown only 3% during the past year. That pace is half a point better than the 2.5% trend during this expansion. But since spending rose so much faster, the personal savings rate in the second quarter fell to a mere 0.6%, the lowest in the postwar period.

Are consumers in dire financial straits? The data suggest not: Household debt service for installment and mortgage loans is high, but it remains below the peak of the late 1980s and has even leveled off in the past year. Instead, the unparalleled drop in the saving rate is clear evidence that households are supplementing their wage and salary income with capital gains from the stock market. And with double-digit returns

on existing stockholdings, many households do not feel the need to add any more to their nest eggs.

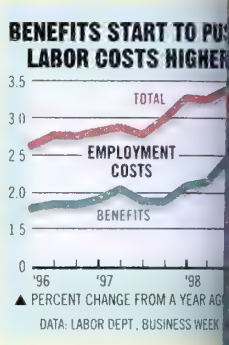
Capital gains also are fueling the housing boom. Sales of new houses rose to another record level in June, an annual rate of 935,000. And the inventory of unsold new homes fell to a new low, a supply of only 3.7 months, suggesting further support for future building. Economists have been predicting the demise of homebuilding ever since the mild winter boosted first-quarter construction. But in July, mortgage applications remained high, and builders said market conditions were the best ever, even though mortgage rates are no lower now than they were in January.

BUSINESS INVESTMENT in new equipment tells a similar tale. Outlays rose at a 17.8% annual rate in the second quarter, after surging 34.2% in the first quarter. That was the fastest two-quarter pace in 14 years. Such a pace would have made more sense back when profits were soaring at double-digit rates, but it occurred at a time when profit growth has been dead in the water for three quarters. Instead, a booming stock market and low borrowing rates seem to have been important props under capital spending. But that reliance leaves business outlays vulnerable to a pullback in the stock market.

Wall Street's fortunes, in turn, are dependent on healthy earnings expectations. But the prognosis for corporate earnings is not good. The problem is r just Asia. It is also rising labor costs.

The employment cost index (ECI), which covers wh businesses shell out for wages and benefits, rose larger-than-expected 0.9% in the second quarter. Th brought the annual pace from a year ago to 3.5%, t fastest since 1993 and up from 2.8% this time la year. The key feature of the latest ECI is that the p dicted pickup in benefits is now clearly happeni (chart). Benefit growth is the fastest in three years

Using the Commerce Dept.'s revised price index for consumer spending, which shows inflation running at 0.9%, the 3.5% pace in the ECI means that workers' real compensation is rising 2.5% per year. That's a boon for workers, but it's a bane for profits, because real pay is increasing far faster than even good gains in productivity are capable of offsetting.



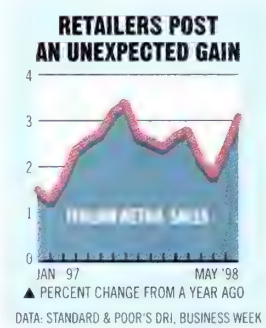
Those profit worries are weighing heavily on st prices. So, an otherwise excellent economic outl now has a new uncertainty: The stock market, which fered so much aid and comfort to demand on its way toward 10,000, will cause damage on its way down

ITALY

LAGGING EXPORTS ARE A DRAG ON THE ECONOMY

The latest data put Italy's second-quarter performance under a cloud. But the central bank is still holding back on cutting interest rates.

As with most other industrialized nations, Italy's biggest drag has come from foreign trade as the Asian crisis hits exports. The trade surplus with non-European Union nations fell 7.7% in the second quarter, compared with a year ago. For the first two months of the quarter, Italy's total trade surplus, including the EU, is down 5% from a year ago. Moreover, business surveys suggest a production slowdown in coming months. Factory orders, which are volatile month to month, were nearly level last quarter with their year-ago levels.



On the plus side, retail sales rose by a greater-than-expected 3.1% in May (chart). But shoppers are worried about the weak labor markets. The jobless rate rose to 12.5% in April, up from 12.2% in January. And when consumer confidence plunged in July, unemployment fears were the main reason. Such jitters could curtail spending later on.

Real gross domestic product in the first quarter was 2.5% higher than a year ago, but growth was probably less than 2% in the second quarter. That suggests Italy may not make the consensus forecast of 2.3% growth for all of 1998. Real GDP grew by 2.6% in 1997.

Even so, the hawkish Bank of Italy has not trimmed its discou rate since April. The BOI may be trying to slow inflation to an eve lower pace than its 1.8% July rate. Some analysts think BOI Governor Antonio Fazio wants t wait till next year's budget is re leased in September. The budge may forgo fiscal austerity in ord to spend money on job creation.

The BOI cannot wait for long, though. As a founding member the single European currency, Italy must reduce its rates to match those of the other 10 nations, most notably Germany. Right now, Germany's short-ter rates are about 1½ percentage points lower than Italy's. So if t BOI doesn't ease again soon, the rate cuts later on in the second half will have to be substantial.

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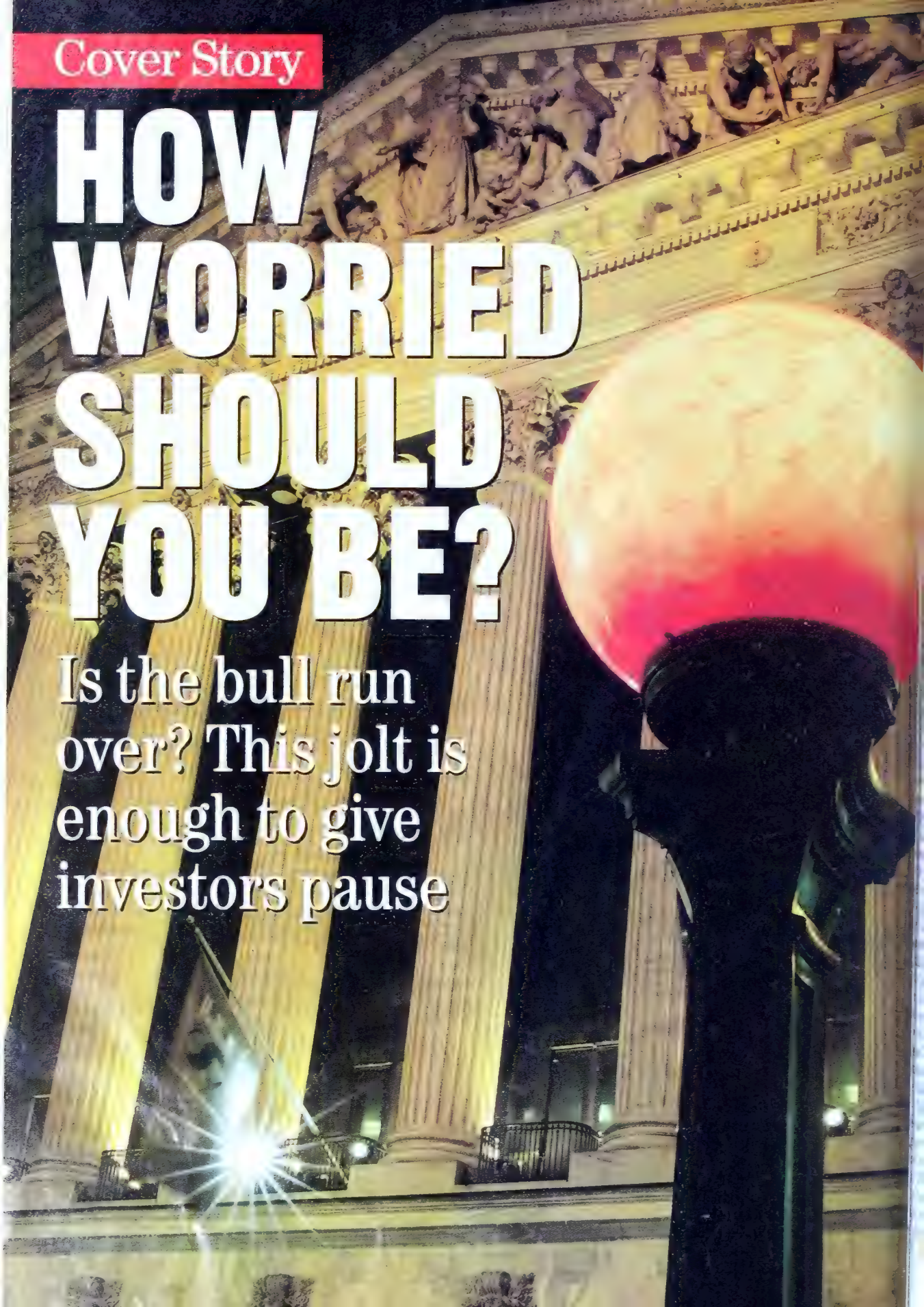
Cover Story

HOW WORRIED SHOULD YOU BE?

Is the bull run over? This jolt is enough to give investors pause



It was bound to happen. For months now, as the blue-chip averages pushed higher and higher, support for the stock market's advance grew thinner and thinner. New highs for big-name blue chips masked the fact that the vast majority of stocks were not taking part in the bull run. Meanwhile, downward pressure on investor

ent was mounting on all fronts: In Washington, the po- heat on President Clinton was intensifying as Monicagate back onto the front pages, raising nervous doubts foreign investors. In Japan, the election of a new Prime er did nothing to assuage fears that there is still no end t to its economic crisis. On Wall Street, which had long to the hope that Asia's impact would be small and fleet- second-quarter results came in, analysts woke up to the g severity of Asia's woes and began slashing earnings tions.

Aug. 4, the jolt came that even the most carefree in- couldn't ignore: A 299-point, or 3.4%, plunge in the Dow industrial average that shaved $1.1 trillion from the to- rket capitaliza- of New York Exchange issues bliterated the of the past few s.

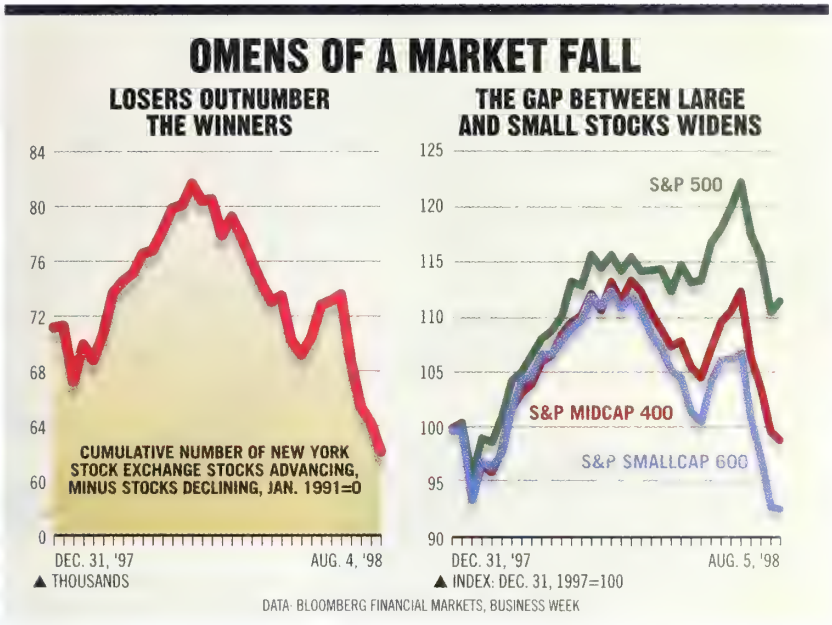
QUESTIONS. In ll swoop, the evel of a nation nt skyrocketing. ountry where s financial fu- nd the economy easingly tied to k market (page d where the e of market ranges from ivers to CEOs, questions on e's lips are the s the great bull over? Is this a normal mar- off, or the start of a bear market? The market's per- e on Aug. 5 gave little clue. The Dow took a wild ing as much as 125 points, but finishing up 59 points for at 8547—down nearly 10% from its high, but still up the year. Ominously, though, small-cap and mid-cap ontinued their slide.

will we know if it's a correction for the bull or the birth r? Over the past five years, there have been many ns, and after each, the market shrugged and continued higher, scoring eye-popping gains year after year.

this time may be different. The ack could take far longer—at mini- vestors may have to settle for av- r subpar gains for at least a few This time, the market is acting backdrop of far greater uncertain- s woes seem to be worsening—as ripple effects. And now, the impact J.S. economy can no longer be ig- nored: A sharp drop in exports helped push down gross domestic product growth to 1.4% in the second quarter, stirring fears that the long economic expansion could be slowing.

So, where is the market headed? The answer depends on which way you analyze the conditions. Strategists who assess such fundamental economic forces as inflation, interest rates, and basic demand are generally taking a hopeful view. The long-term picture remains healthy, even though short-term jitters can roil the markets. Technical analysts, however, remain alarmed about the structural dynamics of the market—factors such as the breadth of its advance and the numbers of new highs and lows being achieved.

Earnings uncertainty makes it difficult for anybody to put a value on the overall market. Analysts have been ratcheting down forecasts for weeks. According to First Call Corp., at the start of the second quarter analysts expected third-quarter earnings to grow 11.5%. By mid-July, that number fell to 8.9%. Estimates are now being shaved a tenth of a percent a day, and the current estimate is 6.7%.



DATA: BLOOMBERG FINANCIAL MARKETS, BUSINESS WEEK

No question the correction made a highly priced stock market a lot cheaper, and that is attracting some new buying. But are stocks really cheap? That depends on the level of earnings and interest rates and what method you use to relate the two (table).

Right now, for instance, investment strategists at Morgan Stanley Dean Witter are forecasting operating earnings of $51 per share for the Standard & Poor's 500-stock index over the next 12 months, about a 10% gain over the number for the past 12 months. What kind of S&P price does that warrant? If you use a 5.5% yield on the 30-year Treasury bond, the fair value is 1055; bump the yield up to 6%, and fair value is 960. The long bond is now about 5.7%, which translates into a fair value of about 1000. By this reckoning, the market is nearly 8% above fair value. At the high a few weeks ago, the same calculation would have shown an S&P 500 overvalued by nearly 20%.

That's not the only way to value a market, however. PaineWebber Inc. strategists argue that lower inflation justifies higher price-earnings ratios because investors keep more

RELATED STORIES

A Special Report on the social backlash sparked by the Asian financial crisis appears on page 46. The Corporate Scoreboard detailing second-quarter earnings begins on page 82.

of what they make. Even now, "inflation is so low that it argues for higher valuations in the stock market," says PaineWebber strategist Mary C. Farrell. Wage increases are more than covered by productivity gains, she says, and mounting budget surpluses in Washington will help keep inflation low. Earnings concerns are overblown, she says, because some high-profile companies were hit by lower commodity prices and Asian problems. For the second quarter, she figures that the earnings of the median S&P 500 stock is up 10%. "We're not looking at a broad deterioration in earnings, but some definable problems," says Farrell.

The market's most steadfast bull, Goldman, Sachs & Co.'s Abby Joseph Cohen, scoffs at the notion that stocks are overvalued. The market decline was an overreaction, she says, and stocks are now undervalued. "We don't see any need to make revisions on the profit picture," says Cohen, who says the Dow Jones industrial average could reach 9300 by yearend. "At the same time, stock prices have declined and the inflation picture looks even more favorable." Cohen says there has been confusion about reported earnings—which dropped 2%, according to BUSINESS WEEK (page 82). When earnings are adjusted for special charges, operating earnings for the second quarter appear to be up 5.6% for the S&P 500, she says.

Some fundamental analysts, however, are worried not about inflation, but the damage that could be done by deflation. International Strategy & Investment Group's Edward S. Hyman Jr. says that the bleak situation in Asia is causing the pricing power of Group of Eight nations to take a big hit. On Aug. 3, he lowered his 1998 nominal gross domestic product forecast from 4% to 3% for the G-8, a low number by historic standards.

For technical analysts, conditions in the equity markets give little reason to hope for a speedy uptick. Prudential Securities Inc.'s chief technical analyst, Ralph J. Acampora, a longtime bull, made a splashy metamorphosis into a bear during a mid-day appearance on CNBC on Aug. 4, helping speed the market's tumble that day. He said that conditions were right for the Dow to fall 20% from its high. "I was more important to Clinton for about an hour," quips Acampora.

His forecast translates into a loss of almost 1,900 points from the Dow's July 17 high. With the Aug. 4 fall, the market is already halfway there, down about 10% from its high. Acampora is worried not about rising interest rates but about the exposure of big-cap stocks to Asia. Still, he says, "this is a cyclical bear market, which could last a few months, in the midst of a secular bull market."

Why the change of heart? One technical indicator that has been making Acampora and other technicians nervous is the high level of new lows for individual stocks. To a technical analyst, that is a sign that the market has not yet bottomed out. "Usually, when a decline is over, the new lows shrink to nothing," says Mark Arbeter, chief technical analyst at Standard & Poor's Corp.

BROADER RALLIES. There hasn't been quite enough gnashing of teeth to satisfy some analysts. "One annoying factor about this drop is that it's been so orderly," says Barry Hyman, chief market analyst at Ehrenkrantz King Nussbaum. "We haven't seen the signs of capitulation." When the market does rally, he says, "it will have to be a lot broader than the rallies we've had recently" in order to last.

Another indicator that still troubles market technicians is the advance-decline line (chart). The line nets out each day's number of New York Stock Exchange advancing and declining issues and adds the results to the previous day's number. The line is cumulative. Technicians say the advance-decline line has been telling a worrisome tale: The line peaked in early April, while the market kept on rising. That suggested that the market was driving higher on the backs of fewer and fewer stocks. Analysts prefer to see the market index and the advance-decline line moving in tandem.

Technicians also keep a sharp eye on divergences between various sectors of the market. To them, the extent of the market's dec

AFTER THE PEAK

The events that led to the Aug. 4 sell-off in the stock market

JULY 17 Dow Jones industrial average hits 9337.97, a record.

JULY 21 Hewlett-Packard warns that third-quarter results will be lackluster thanks to weakness in Asia.

GREENSPAN: *Words of caution*

JULY 21 Federal Reserve Chairman Alan Greenspan warns that history suggests a correction is bound to happen, but its timing is uncertain.

JULY 29 White House acknowledges that Independent Counsel Kenneth Starr has subpoenaed President Clinton, raising concerns among overseas investors.

MONICA: *A factor?*

GM WORKERS

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no shock. The warning signals there. One of the most striking he divergence in performance een large-capitalization and capitalization indices. While the soared more than 18% from l to July 17, the Standard & s SmallCap 600-stock index l badly, up about 7% for the period.

en within the big-cap universe, anks of rallying stocks were Just 70 stocks explained the en-998 gain in the S&P 500 through nd of July. Also, while the Dow o a new high of 9338 on July e number of stocks making 52-highs did not rise, as it had in rlier June rally. The ratio of ad-ng stocks to declining stocks n fact, steadily deteriorating.

s this "Nifty Fifty" develop-that set the market up for a ay some strategists. The last of rallies have focused on just 20 stocks, notes Barry Hyman. urned these stocks from good h companies into growth mo-m issues with price-earnings of up to 50, 60, even 70." That investors had to be willing to ree to four times the stock's 1 rate. And it meant the ac-ould be driven by momentum players, whose game is to gh and sell higher—and to get out if momentum falters. vidual investors don't seem to share the technicians' ns. While Todd Morgan of Bel Air Capital in Los s, which manages $1.7 billion, says he took lots of the anxiety level wasn't that high. Clients just want-nake sure that they should stay the course." By the end of the day, the firm had $50 million in new money earmarked for equities.

Customers weren't panicking at Datek Online Brokerage Services Corp., either, and volume was normal. "It doesn't surprise me that volume didn't pick up on a down day," says Alex Goor, Datek Online's executive vice-president. "Individual investors have more faith in this market." Investors in the heartland also played it cool. Jud A. Powell, a broker for Edward Jones in Abilene, Tex., says he handled over a dozen buy orders on Aug. 4 for his retail clients, and no sell orders.

One new element in the market brew are the developments unfolding in Monicagate. That is raising the possibility that President Clinton may find his struggles with Independent Counsel Kenneth W. Starr more challenging than anticipated. That is especially unsettling to foreign investors, who pumped $29 billion into U.S. equities in the year's first quarter, equivalent to an annualized rate of $116 billion.

Americans tell pollsters they don't care much about the President's peccadilloes, but the market seems to have been at least somewhat sensitive to Monicagate. On July 28, news broke that Monica Lewinksy had been granted transactional immunity for her upcoming testimony before a grand jury. That and earnings jitters sent the stock market down 212 points before it pared the loss to 93.5 points. It continued to fall on July 29 when the White House acknowledged that Clinton had been subpoenaed.

It may well be that the fundamental strategists who see this downdraft as merely a short interruption in the 15-year-old bull market will once again carry the day. And those investors who keep their cool and even view the market's drop as a buying opportunity may be the big winners a year from now. But in order for that to happen, the market will have to overcome some of the highest hurdles it's seen in a long time.

By Suzanne Woolley and Jeffrey M. Laderman in New York, with bureau reports

IS THE MARKET OVERVALUED?

It depends on what you think about earnings and interest rates. Suppose you think the S&P 500 companies will earn $50 a share in the next 12 months. If the 30-year U.S. Treasury yielded 5.5%, the fair value for the S&P would be 1037, about 4.5% below the current level, according to Morgan Stanley Dean Witter. That indicates that even well into a correction, the S&P 500 is overvalued. But if you assume higher earnings growth or lower interest rates, stocks could be cheap.

OPERATING EARNINGS FOR THE S&P 500 OVER NEXT 12 MONTHS	YIELD ON 30-YEAR U.S. TREASURY BOND		
	5%	5.5%	6%
$47	1087	986	898
48	1106	1003	914
49	1126	1020	929
50	1145	**1037**	945
51	1164	1055	960
52	1183	1072	975
53	1202	1089	991

DATA: MORGAN STANLEY DEAN WITTER, BUSINESS WEEK

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OBUCHI: *Questions*

AUG. 3 The National Association of Purchasing Management index is reported at 49.1, its fourth consecutive decline.

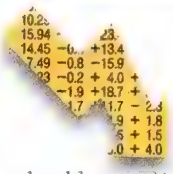
AUG. 4 Ford reports its July auto sales fell 4.3%, more than expected.

FORD PLANT: *Surprising sales weakness*

COMMENTARY

By Robert Barker

DON'T LET MR. MARKET PUSH YOU AROUND



Zap the TV. Unplug the modem. Stuff your ears with cotton, and turn a blind eye to the financial tips in your daily paper. When your broker phones, tell him you'll call back. Amid a shaky stock market, this is about the last moment you should pay attention to investment advice.

Except this: Think of the stock market as a tool for managing your money—no more and no less—and remember that you'll enjoy much better results if you use it instead of letting it use you.

Easy enough to state, that philosophy is difficult to maintain. "The worst thing that market volatility does to people is give day-to-day focus to what should be a long-term endeavor," says James P. O'Shaughnessy, chairman of O'Shaughnessy Capital Management Inc. in Greenwich, Conn., and author of *What Works on Wall Street.*

Test yourself. Has the buzz from the market's drop since July 17 prompted you to dump shares you hadn't planned on selling? Has it kept you from buying stock in companies whose future you see as bright? Ask yourself, who's really in charge here? You? Or the market?

If you suspect Mr. Market is getting the best of you, relax. Regroup. And you may find you don't need to lift a finger. When you're in charge of your portfolio, you'll need to use this tool, the stock market, in just two sets of conditions.

Cover Story

If you suddenly discover a stock that you feel is undervalued or you find yourself with money—an inheritance, say—that needs to go to work, congratulations! You're a buyer. Then there are circumstances that boost your cash needs—a daughter's college tuition, a great bargain on a beach house. Or perhaps the outlook for a stock you own has deteriorated. Now, you're a seller.

BUY AWAY. Either way, you have some options. Sellers would do better to liquidate other, stronger assets such as bonds or, perhaps, European stocks. The cash might even flow from savings or money-market accounts.

The point is to find the asset class where demand for what you own runs strongest. And, if possible, wait to sell when buyers converge on companies you had aimed to unload. Such stocks as Gillette Co., popular and pricey despite the sell-off, would be good candidates. Remember: You want to be on the lonelier side of any trade.

JUST IGNORE IT: *Market swings can drive you batty*

And if you're a buyer? You're in a better spot when the market sags. "Why in the world would you get upse when the stock market goes down when it gives you a chance to buy at lower prices?" asks Peggy M. Ruhlin, a partner in Budros & Ruhlin Inc. in Columbus, Ohio, which manages $400 million.

If you had a shopping list of stocks pre-correction, lower prices should only encourage you to buy more. Robert Mohn, manager of the $280 million Acorn USA stock fund, says he did just that as the Dow dropped on Aug. 4, building bigger stakes in favorites such as secur ty-services company Wackenhut Corp.

So where to put your money to work, if that's your plan? O'Shaughnessy observes that long-lagging small-company stocks are down nearly 9% this year, while the Dow is still up 8%, despite the recent dive. "Five years from now, we're going to be asking ourselves, 'Why wer we paying 50 times earnings for Coca-Cola when its prospects were so limited?' " he says. He deems small caps the single best place for long-term investors to put their money now.

And if you don't need to buy or sell? Don't let Mr. Ma ket tell you what to do The market, Ruhlin says, shouldn't be kneel to "as a god that has some mastery over our lives." It's a tool, and like any other it exists for our use. Think of it Who would let a buzzi chain saw dictate whic tree to cut down?

Senior writer Bark covers personal financ for BUSINESS WEEK.

SOME GUIDELINES FOR A CORRECTION

A correction shouldn't change your basic approach, but could lead you to some new moves.

If you had planned to take money out of stocks...

- ▶ Sell stronger assets—bonds, fixed-income funds, or European stocks—first.
- ▶ If you must sell stocks, first unload your big losers and book a tax loss.
- ▶ Hold stocks in companies you liked before, especially if they are cheaper.

If you had planned to put more money into stocks...

- ▶ Invest more in companies or mutual funds you liked before the sell-off.
- ▶ Focus on areas—such as small-cap stocks—where buyers are scarce.
- ▶ Never mind market swings: You can't predict them all. Try dollar-cost averaging.

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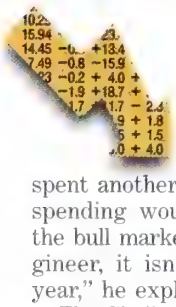
Cover Story

A DOWNTURN COULD REALLY ROCK THE BOAT

Paper wealth has kept the economy riding high–so look out if consumers get nervous



Pat and Joseph Massucci, a fortysomething couple from Joliet, Ill., have just bought a new addition to their home recording studio—a $1,000 electronic drum set. Mark and Diane Shelley of Worcester, Mass., bought three new bicycles valued at $20,000 and spent another $6,000 on a cycling vacation. Most years, such spending would seem extravagant. But thanks in part to the bull market, says Mark Shelley, a 37-year-old software engineer, it isn't. "We've met our investment goals for the year," he explains. The rest is gravy.

The Shelleys and the Massuccis are classic examples of the "wealth effect"—the feeling of financial well-being that turns ordinary consumers into big spenders. With the market swelling the value of their portfolios and with home values appreciating at double-digit annual rates in many areas, millions of families feel that they don't have to worry so much about meeting savings goals for retirement or college educations. So the savings rate has plunged to 0.2% of gross domestic product—while spending has surged at a 6% annual rate so far this year. "The stock market has played a big part in people's confidence," says Steve Beers, manager of Keefe Real Estate Inc. in Lake Geneva, Wis., where multimillion-dollar homes are selling briskly.

Until now, the spending spree has been a tonic for the economy. For the past year, even as the Asian crisis has deepened and U.S. exports have cratered, carefree consumers have kept the economy going strong. Last quarter Americans shelled out money at an annual rate topping $5 trillion. After adjusting for inflation, that's 5.35% more than a year ago. In June alone, spending rose by 0.6%, three times as much as incomes.

The splurging has helped all sorts of companies—from interior decorators to resorts to boatyards. "If business keeps up, this will be the best year I've ever had," says Marcello Pogalla, who has been selling swimming pools in Barrington, Ill., for 26 years. In 1998, he expects to sell at least 175 pools at $45,000 to $50,000 each.

But what happens now, when the market has suddenly dropped 9% from its all-time high, reached in July? What if the correction deepens and the upbeat psychology induced by the wealth effect gives way to an anxiety attack? If it means that American pocketbooks suddenly snap shut, it's bear time for the Goldilocks economy. "With a correction, we could get a significant slowdown in consumption," warns Joel Prakken, chairman of Macroeconomic Advisers of St. Louis.

Nobody knows yet whether the midsummer stumble will be enough to turn

THE SCENA UP TO NOW

DATA COMMERCE DEP FEDERAL RESERVE BO

BUY, BUY: SAVING HAS NOT BEEN A PRIORITY

For every $1 hike in stock values, personal spending rises 4¢. That explains the run on cars, houses, boats, furniture...

ers into savers. But clearly, the jolting 299-point slide in ow Jones industrial average on Aug. 4—and the mar- eesawing the next day—have millions of consumers eye- e market with a twinge of concern. Bruce Steinberg, economist at Merrill Lynch & Co., notes: "The U.S. ıy is more sensitive to the equity market than it or any economy has ever been." With interest rates still low, may still buy that new car, but they might go for the instead of the Lexus. And folks such as the Massuc- ght hold off on discretionary spending such as that et.

GE. In other words, the wealth effect works both Economists figure that for every $1 rise in stock val- ersonal spending rises 4¢. And thanks to the Wall boom, personal assets are up $7 trillion since 1996, ac- to the Federal Reserve Board. By the same token, a in stock values slows spending by 4¢—or perhaps a e.

market slide comes amid signs that consumers may ly to take a breather. Consumer confidence dipped in July, to 135.4 from 138.2. Credit-card balances in t quarter were up 10% from the year before, and encies were running at higher levels than they did in t recession, according to Veribanc Inc., a bank re- firm. Meanwhile, retail sales in June flagged a bit. les, which had been streaking toward a record, have Ford reported a 4.3% drop in June sales, worse than expected. General Motors Corp., crippled by its lengthy strike, saw sales plunge 38%.

The GM strike and the export slump clearly have hurt the manufacturing sector: The National Association of Purchasing Managers index, at 49.1, has dropped for four consecutive months.

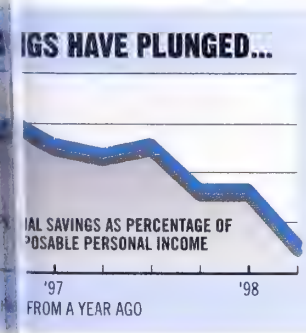
DELAYED REACTION. Few economists are even hinting about a recession anytime soon. But that forecast could change if consumers retreat as quickly as the market has. Mark Zandi, chief economist at Regional Financial Associates in West Chester, Pa., figures it would take a punishing 30% drop in stock prices, and an even worse Asia crisis, to produce a contraction in spending. Even then, he says, the reduction would happen over time. "It takes up to two years after a change in net worth to feel all the consumption effects," he explains.

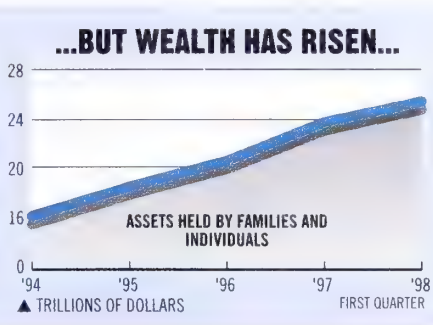
Even if the market just stalls, though, there could be deeper consequences than a cyclical slowdown. Economists fret about the savings rate, which has plunged from 9% in 1982 to 2% last year as consumers have seen their retirement accounts swell with the market. And over the past year, the savings rate has gone from bad to alarming. Revised Commerce Dept. calculations show it fell to 0.2% in June. If the trend continues, it could have grave consequences when baby boomers begin retiring. Says M. Carey Leahey, chief U.S. economist at High Frequency Economics of Valhalla, N.Y.: "Unless the market continues to deliver a 10% to 12% return, people aren't going to make it with what they are doing now."

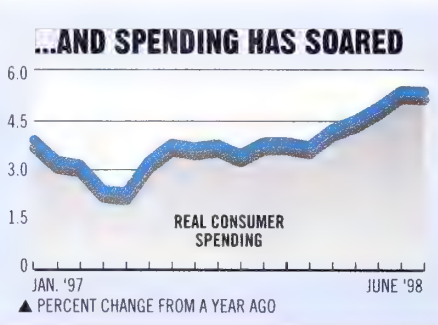
In part, the savings numbers look so grim because government economists calculate savings differently from the way real people do. For instance, Commerce excludes increases in the value of housing and leaves out capital gains earned on stocks and mutual funds. To most Americans, both are major sources of new wealth.

But the paper wealth already has begun to vanish. If the market is merely in the midst of another in a series of pauses, consumer spending will probably remain solid. But if this is the Big One—the 20% or greater correction the bears have long been predicting—Wall Street could bring consumers, and much of business, down with it.

By Howard Gleckman, with Mike McNamee, in Washington, Ann Therese Palmer in Chicago, and bureau reports







ON THE LINE: *Can Delphi lure enou work to make up for the loss of GM*

DETROIT

GM: IT'LL BE A LONG ROAD BACK

A Delphi spin-off and other moves are just the first steps

General Motors Corp. Chairman John F. Smith Jr. has something to prove. After this summer's 54-day, $2 billion strike, Smith is out to show that GM ain't dead yet. On Aug. 3 and 4, he unveiled a series of moves to streamline the carmaker—by spinning off its parts business, overhauling marketing operations, and eliminating 1,000 white-collar jobs. Then, on Aug. 5, he blurted out surprising news at an industry conference in Traverse City, Mich.: Contrary to rumors during the strike about GM's schemes to send manufacturing to Mexico, he said the auto giant will build new factories in the U.S.

Together, these moves—if they're carried out as promised—would go a long way to start rebuilding. But the task is huge. The strike pushed GM's market share to a historic low of 20% in July and further damaged already frayed labor relations. Smith's plan to spin off GM's $31.5 billion Delphi Automotive Systems parts unit next year won't help. The union is leery of the move, which would eliminate 200,000 workers from GM's payroll in one fell swoop.

Smith's new-plant promise could serve as an olive branch to union leaders—albeit a small one. The plants Smith promised would be modeled after a half-dozen "plants of the future" GM is building around the globe that need fewer workers and depend heavily on outside suppliers for subassemblies. They would be built near old factories that eventually would be decommissioned, Smith said. So union members can stop fretting about about their jobs moving to Mexico and start worrying whether they'll be eliminated by new, highly automated facilities.

Smith says the company will discuss such issues with union leaders—part of the new candor that the company and the UAW agreed to in the strike settlement. GM's first big poststr move—the announcement of plans to off Delphi—didn't bode well for the era of labor-management dialogue: company informed union leaders sho before the public announcement. "I about sticking a thumb in someone's e says Dan Thetford, president of the u at the Flint Delphi plant that struck month. "It makes me wonder where relationship is headed."

CERTAIN BATTLE. Still, the union i sure yet whether it will try to fight spin-off. An independent Delphi mi in fact, make the badly needed inv ment in the operation that could ultimately preserve jobs. But one cer battle looms: The UAW will insist Delphi be included in the 1999 Big T contract. Delphi says it's determine negotiate separately.

The Delphi announcement was gre more warmly on Street, where inves had been clamoring the spin-off of the b profitable business. the praise wasn't u mous. The plan "se fraught with risk," Standard & Poor's C auto analyst S Sprinzen, who respo to the spin-off new downgrading his GM look from neutral to ative. There are trou questions about wh

GM TRIES TO SHIFT INTO HIGHER GEAR

Since the strike ended, GM has promised to:

- Build new production plants in the U.S.
- Spin off its Delphi parts division
- Combine its marketing operations and shed 1,000 executives

ni can compete as an independent
e cutthroat auto-supplier world and
her the market will smile on a mas-
-probably in the range of $2.4 billion
20% stake—public offering of a
al auto stock.
st how tricky will it be? Ask Ford
r Co. After planning a spin-off of
.7 billion Visteon parts unit for al-
two years, Ford is shelving the
union and Wall Street sources have
BUSINESS WEEK. Ford declined to
m that change of heart. Meanwhile,
on is still working to build up its list
n-Ford customers, which currently
nts for just 9% of sales. And a re-
failed bid to acquire ITT Automo-
brake business was a setback, the
es say. Ford, with the best labor
ons in the auto industry, is also sen-
to riling the UAW.

R RISK. At GM, "the No. 1 risk [of a
ff] is the possibility that this would
for further problems in labor rela-
–all this coming about in a con-
negotiation year," says Sprinzen.
so worries that GM could undercut
pside of the spin-off" by trying to
the UAW by guaranteeing job se-
or promising long-term contracts.
w would Delphi fare as an inde-
nt? On one hand, the parts-maker
ave better success in its efforts to
on-GM orders. On the other, Delphi
heavily dependent on contracts to
GM. Nearly 80% of revenue comes
he parent. And while the auto gi-
s given its parts unit preferential
ient in the past, that will likely
er Delphi leaves the fold. "When
omes to shove, Delphi will get
out," says one auto analyst.
y analysts hoped the same fate
soon befall other GM units, such
smobile, where sales have fallen
the past dozen years. Smith ve-
ly insists that GM doesn't need to
divisions. "We are not in a race
ık our company," he says.
he's all for efficiency. In his Aug. 4
cement, Smith signaled a massive
lation of management of the car
is—including the elimination of
werful general managers for each.
ace its decentralized marketing
ons, GM will create a national sales
iat will represent five divisions,
ıg Saturn. The move will elimi-
to 1,000 of its 5,000 sales jobs
e up to $300 million—one long-
step toward trimming GM's bloat-
aucracy.
ed, Smith hopes his restructuring
that GM has given up its old ar-
and complacency. "We are not
l any more," he vows.

Kathleen Kerwin and Keith
m in Traverse City, Mich., and
Bernstein in Washington

INTERNET

A NEW CHAPTER FOR AMAZON.COM

The book giant's high-tech buys could pit it against Yahoo!

From the start, Jeffrey P. Bezos, founder and chief executive officer of Amazon.com Inc., wanted to do more than just run the biggest bookstore on earth—or in cyberspace. Now, it's becoming clearer how much more: On Aug. 4, Amazon.com purchased two Net startup companies for a total of $280 million that will help elevate his online store into an Internet commerce hub—like Yahoo! and other Web portals, but one aimed at shoppers, not merely fickle cybercruisers who want to hang out, browse, and chat. Says Bezos: "Our goal is to be an E-commerce destination."

BEZOS' AIM: *"To be an E-commerce destination"*

How so? Software from Junglee Corp. in Sunnyvale, Calif., for which Amazon is paying $180 million, will help consumers who visit Amazon.com to comparison-shop for everything from personal computers to perfume. PlanetAll in Cambridge, Mass., another of the new Amazon ventures, offers a service that currently lets some 1.5 million people keep in touch with each other online by organizing their address books and coordinating their appointment calendars. With its already flourishing online bookshop, these recent acquisitions will give Amazon the potential to become "the Wal-Mart of online," according to Aberdeen Group analyst Mark P. Peabody.

The moves raise the stakes for Amazon's current rivals, such as Barnes & Noble Inc. and Borders Group Inc. And they put Amazon in more direct competition with such darlings of the Net as Yahoo!, Excite, and America Online. All aim to make E-commerce a central piece of their business models.

"UBER-PORTAL." Bezos remains coy about specific plans for Amazon's expansion. Recently, however, he started selling CDs and will soon move into videos. Junglee's shopping search engine opens up the potential for Amazon to offer products from other sites, for which it could charge a commission or advertising fees. Bezos plans to use PlanetAll to enhance customer service, offering niceties such as reminders to send birthday gifts to relatives.

But how far Amazon can go, and how soon, remain big questions. By evolving from an online bookseller into an online shopping destination for all cybercruisers, Amazon could come into conflict with sites such as Yahoo!, which it now pays to send it traffic. And it's unclear how many merchants will be willing to sell through Amazon. "Are they going to subjugate their brands to this uber-portal?" asks Scott Walchek, CEO of C2B Technologies Inc., which sells software similar to Junglee's. He says many merchants using Junglee have called him since the Amazon deal to check out his service.

Finally, there's a danger Amazon could lose some of the focus that has kept its sales rocketing—up nearly fivefold, to $203 million, in the first six months of 1998. It's losing money, $30 million so far this year, and can't afford a misstep. But Bezos insists that "the vision has always been broader than books and music." Now, maybe even broad enough to justify Amazon's name.

By Robert D. Hof in San Mateo, Calif.

LABOR

IVAN THE CONCILIATOR

Union empathy could pay off for Bell Atlantic's Seidenberg

By Aug. 15, the Communications Workers of America could go out on strike at four regional phone companies: Bell Atlantic, BellSouth, U S West, and Southern New England Telephone. But if the biggest, Bell Atlantic Corp., is struck—it faces an Aug. 8 deadline—it won't be because the boss wants to get tough with the union.

In fact, newly named Chief Executive Ivan G. Seidenberg seems ready to side with the union—even against some of his managers—by agreeing to the CWA's demands to stop outsourcing certain jobs. "They're going to pull the plug on outsourcing," says CWA President Morton Bahr. In doing so, Seidenberg will overrule some top execs at the original Bell Atlantic—the Philadelphia-based Baby Bell that merged with Seidenberg's Nynex. Bell Atlantic declined comment.

It's a strange twist on the 1997 Bell Atlantic-Nynex merger, the first among Baby Bells. The 51-year-old Seidenberg, who started as a cable splicer in 1966, cultivated friendly relations with the CWA after becoming president of Nynex in 1994. At Bell Atlantic, meanwhile, under former CEO Raymond W. Smith, labor relations were often contentious. In 1995, the CWA mounted a multimillion-dollar ad campaign to protest the company's extensive outsourcing. An uneasy compromise was reached that left both sides mistrustful.

TELECALM?
Seidenberg's approach—and a commitment to terminate an outsourcing contract—may help avert a pending strike by the CWA

BIG PAYOFF. At Nynex, now Bell Atlantic North, Seidenberg agreed to an innovative labor deal to guarantee union jobs. He also agreed to generous buyouts for workers so the company could pursue an ambitious reengineering plan.

Seidenberg's labor-friendly approach has paid off. The union backed the Nynex-Bell Atlantic merger and is smiling on Bell Atlantic's proposed deal with GTE Corp., another company with which the CWA has good relations. By contrast, the union lobbied regulators to hold up the merger of nonunion companies WorldCom Inc. and MCI Communications Corp.

Earlier this year, Seidenberg's friendly ties with the union helped avert disaster. Bell Atlantic North realized that under its contract with the CWA, it had to extend the 1994 buyout offer to some 14,000 union members—even though it now needed to keep the positions. So management asked the CWA for help (BW—June 8). The union agreed to postpone the buyout for two years in exchange for higher pensions. But the CWA held off signing the deal until Bell Atlantic South negotiated its contract.

That has put Seidenberg on the spot. According to the union, Seidenberg wants to nail down a contract, but Smith's top executive team at Bell Atlantic South has maintained a tough stand on such issues as outsourci Last year, Bell Atlantic South contra ed with Winnipeg-based Faneuil ISG to provide telemarketing work in N folk, Va., that is also done by CWA me bers. Faneuil's 1,050 nonunion work start at $7.50 an hour, according to neuil, vs. $18 for CWA members.

On Aug. 3, Seidenberg ordered end of the outsourcing, says Bahr. as of Aug. Bell Atlan South and union were negotiating other issues could trigge strike by CWA's 95,0 members.

"We're still there, but denberg doe want a war more than I says Bahr. denberg has me that he's ing to cha the culture confrontatio the south." denberg co not be reac for comment

If any of CWA talks lead to a strike rather t new contracts, telecom companies c feel the pinch more quickly than in past. After years of delayering m agement, the Bells have many fe white-collar employees to run th in the case of a showdown. "Str never really mattered in this indu before, but they could this time," Jeffrey H. Keefe, a Rutgers Univer labor-relations professor who cons for Bell Atlantic.

A walkout seems most likely at West Inc. Management wants a for-performance system for installe similar to what unionized sales have. However, Bahr vows he will a strike if the company insists on U S West says it has now agree make the program voluntary for rent employees and hopes there w be a walkout.

So far this year, unionized tel workers have won bigger pay g than other union workers, includi 4% hike at AT&T. The CWA want keep up that record—even if it tak strike or two.

By Aaron Bernstein in Washin with Peter Elstrom in New York

NG RIVALRY: *While DeBartolo is investigated, York is running the team—and may not let him back in*

RTS BUSINESS

DOD, ACTION, THRILLS I THE OWNER'S BOX

will control the 49ers? Brother and sister duke it out

as a typical pre-season game. ting quarterback Steve Young hed as benchwarmer Jim Druck- r threw a pair of interceptions. ne San Francisco 49ers managed eeze by the New England Patri- 13. On the upper deck, a far more ting game was being played out: for control of the team. In one 's suite" sat Edward J. DeBarto- o-owner of the 49ers. In Decem- gave up managing the team as a ury in Louisiana began to inves- is acquisition of a state casino li- In another "suite" sat Larry ill, a Nashville attorney who is ming the team for the other co- -DeBartolo's sister—Denise De- York.

the past eight months, the long- ler owner and his sister have n back rooms over who will con- team once DeBartolo is freed of be. At issue is more than just re direction of the five-time Su- l champions. The DeBartolo or- on was supposed to be raising or a proposed $525 million sta- at would likely give San Fran- Super Bowl in 2003. Now, the ivalry has delayed construction roject—and may kill it.

rtolo says through his attorney intends to resume running the ut York and Thrailkill won't say whether they'll allow DeBartolo back.

For many in the sports world, life without Eddie seems unthinkable. "DeBartolo made this one of the best operations in professional football," says sports agent Leigh Steinberg, who represents seven 49ers, including Young. "My assumption has always been that he'd end up running it again."

Not unless this still escalating battle

> The feud has delayed construction of a $525 million stadium—and may sideline it for good

is resolved. On July 1, National Football League Commissioner Paul Tagliabue held a one-day hearing to try to resolve the feud. At issue is a management contract, signed by DeBartolo's and York's father, that DeBartolo claims gives him control of the team until 2006 and authority to take up to $60 million out of the franchise. Tagliabue is expected to rule soon on the validity of the contract, which York now contends is void.

This is hardly the first time the DeBartolos have fought over money. For years, the two have been joint owners of DeBartolo Corp., a real estate holding company started by their late father in 1944. The company is now invested in racetracks, shopping malls, and of course, the 49ers.

In recent years, York has overseen what remained of the family's real estate holdings while DeBartolo, living in San Francisco, has run the 49ers and built a string of casinos. The siblings feuded over DeBartolo's spending, including his purchase of a second corporate jet and his failed ventures, including a sports-drink company that helped roll up an estimated $60 million in debts. Neither sibling would comment.

TOO MUCH? York also seems alarmed by the scope of the stadium project, with its attached shopping mall, video arcades, restaurants, and plush skyboxes. Her manager, Thrailkill, insists that the project could go as much as $200 million over budget. Since the 49ers are required to help finance or find partners for all but $100 million that will come from the city of San Francisco, Thrailkill is negotiating a new, slimmed-down version with Mills Corp., a major investor in the project's retail portion. "We're feeling very hopeful," says Thrailkill, "but I'm not going to promise you that we can get it done."

For now, the 49ers are getting ready for another season in 3Com Park (formerly Candlestick Park)—and another crack at the NFC's Western division crown. That is, if Young doesn't get hurt and their aging superstar receiver Jerry Rice has recovered from last year's knee injuries. "We were a little sloppy, but we got the job done," says Thrailkill of the 49ers' pre-season victory. Maybe, but it looks like *Swan Lake* compared with the head-butting going on in the owner's box.

By Ronald Grover in Los Angeles

EDITED BY KELLEY HOLLAND

CONFLICTING SIGNALS OVER AMP

IF AT FIRST YOU DON'T SUCceed.... After his attempts to do a friendly deal were rebuffed, AlliedSignal chairman Lawrence Bossidy on Aug. 4 launched an unsolicited bid for electrical connector maker AMP. The Morristown (N. J.) conglomerate, with about $15 billion in revenues, is offering $9.8 billion or $44.50 per share, a 55% premium, for AMP, which had 1997 revenues of about $5.8 billion and which makes connections for cellular telephones and semiconductors. AMP, based in Harrisburg, Pa., asked its shareholders not to take the offer. The company has been hit hard by Asia's economic woes. But it may get a boost in resisting Allied-Signal because Pennsylvania securities law favors companies opposing hostile takeovers.

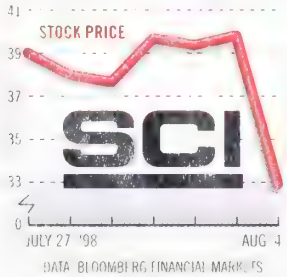
USER-FRIENDLY TREASURIES

WITH THE STOCK MARKET gyrating, are you looking for a cheap flight to quality? The Treasury Dept. is cutting the minimum purchase for its bills and notes to $1,000, from the old base amounts of $5,000 to $10,000. The move will open up the popular Treasury Direct, available through regional Federal Reserve Banks, to thousands of new investors. Buying Treasuries will get even easier on Sept. 16, when investors can start placing orders via the Web (www.publicdebt.treas.gov). The system will charge their bank accounts directly.

CLOSING BELL

SHORT-CIRCUITED

Too low on the food chain? SCI Systems shares fell 7% to 32 13/16 on Aug. 4 after the world's largest contract manufacturer of circuit boards and computer gear warned of lower prices and margins. Why? SCI customers selling sub-$1,000 PCs expect more price wars and are leaning on suppliers such as SCI. "They're under pressure to cut their own prices," says J.C. Bradford analyst William E. Cage Jr. He expects SCI to rebound as it moves into new fields and becomes less dependent on the PC market.



SONY PONIES UP TO THE SEC

THE BOX-OFFICE HORROR OF the Dr. Jekyll flick *Mary Reilly* may have died down, but Sony is still feeling the tremors. The company has agreed to pay the SEC a $1 million fine to settle charges that it improperly warned investors of its $2.7 billion writedown in 1994 from such box-office misfires as the Julia Roberts film. The company purchased Columbia Pictures for $3.4 billion in 1989. Both Sony and Sumio Sano, head of Sony's investor relations unit during the period, agreed to settle without admitting or denying the charges.

THE FRACAS AT PROMUS

CHECKING OUT: PROMUS HOTEL Chairman and CEO Raymond Schultz and President Richard Kelleher are leaving the company, along with directors Richard Ferris and Michael Rose, after they differed on the direction of the company. Schultz had been scheduled to turn over the top job to Kelleher in 1999 as part of the $2 billion merger agreement between Promus and the former Doubletree. "Everyone knew that the two companies had different growth strategies, but no one saw an ugly divorce coming," says Lehman Brothers analyst Joyce Minor. Schultz says Doubletree "was built on quantity without regard to quality."

HEADLINER: ROD CANION

A TUTORIAL FOR SOFTWARE STARTUPS

Compaq Computer cofounder and former Chief Executive Joseph "Rod" Canion is aiming for a comeback. His vehicle: GK Intelligent Systems, a tiny Houston developer of multimedia training software. Since April, Canion and several associates have put $5.4 million into the publicly held company and recruited numerous former Compaq execs to join them.

GK is expected to ship its first product, a Net-navigation tutorial, as early as September. Its products combine multimedia content with artificial-intelligence technology. GK's big advantage over rivals such as CB Systems, Knowledge Universe, and Digital Think, says Canion, is that its courses automatically tailor themselves to each student's level. "This combination of technology," Canion gushes, "is change the-world stuff." Maybe. The company had no revenue and lost $3.1 million in the first nine months of the fiscal year ended in May. But Canion, 53, who owns 12% of the company, already has given GK a boost: Since he joined it in April and started dragging in Compaq cronies, its stock is up more than 500%

By Gary McWilliam

REEBOK'S KICK AT NINE WEST

SHOEMAKERS IMITATE EACH others' designs all the time, but Reebok International claims that Nine West, the nation's top women's dress-shoe maker, has gone too far. On Aug. 4 Reebok filed suit against Nine West Group, claiming it copied popular shoe design made by Reebok's Rockport division. Reebok claims Nine West's Easy Spirit and Highland Creek shoes copied a lacing pattern protected by patent. Nine West attorney Joel Bedol says "the suit has no merit," and adds that the shoes in dispute are no longer being made. But the controversy comes at a bad time for Nine West, whose stock has taken a beating as its profits have slipped.

ET CETERA...

- DuPont will close two production lines and idle a third at its Dacron plants.
- Procter & Gamble is boosting its previously announced $1 billion stock buyback.
- La-Z-Boy is sitting on straight: The company reported record profits.
- Got milk? Parmalat plans to list its shares on the New York Stock Exchange.

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ound a bike. Open your doors to e-commerce. Even give your customers a 3D view of your business. It all begins with a based on the AMD-K6™-2 Processor with 3DNow!™ Expect sharp 3D imaging, smooth video playback and incredibly fast edia. Even sound is more lifelike. Of course, your current Windows® applications run at lightning speed. And our new ! technology lets you see the latest 3D applications the way they were meant to be seen. The fact is, the AMD-K6-2 or with 3DNow! has the power to outperform Pentium® II.* More importantly, it has the power new dimension to your internet experience. Get more information. Visit us at www.amd.com/bike.

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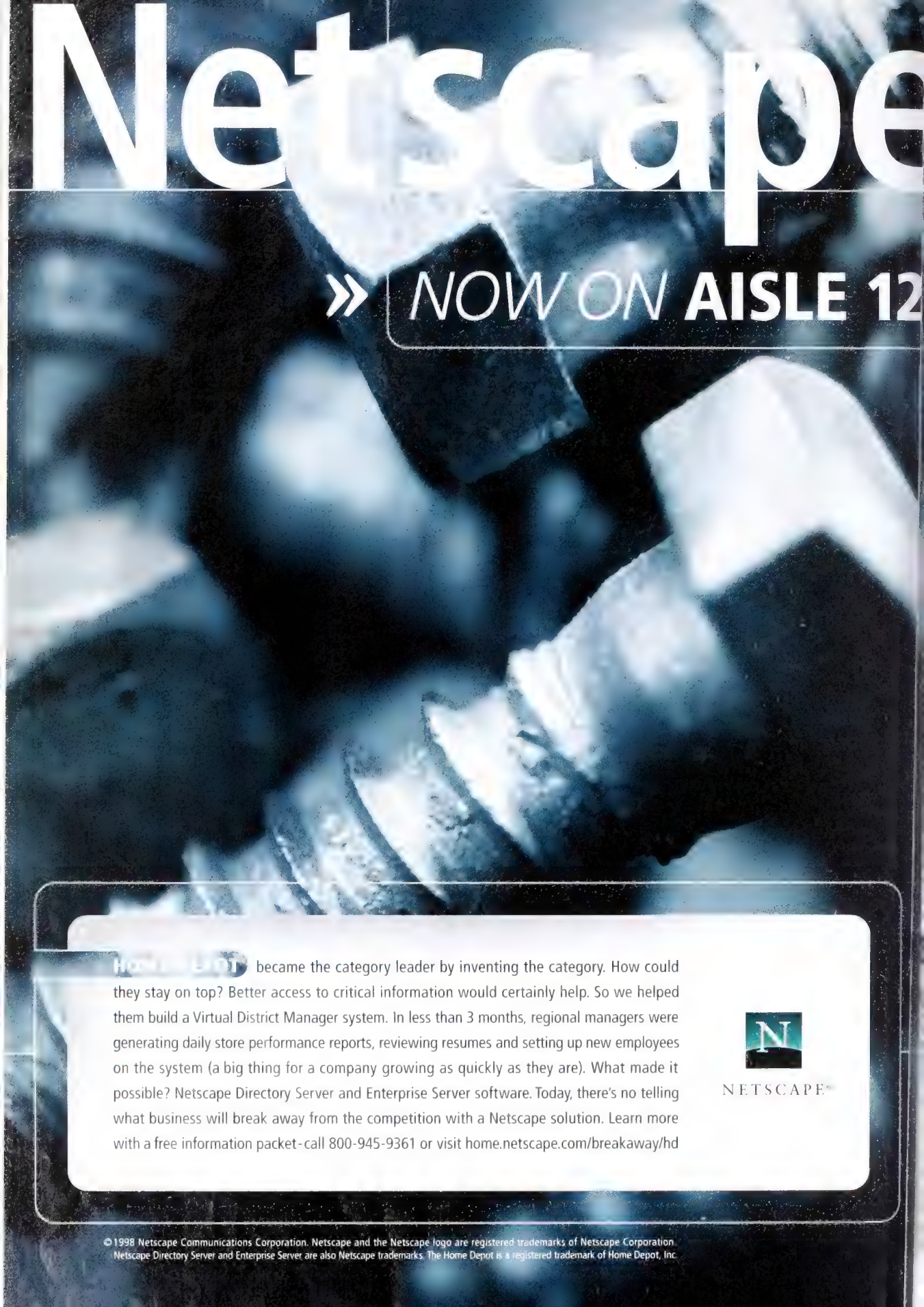

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TED BY OWEN ULLMANN

IAYBE NOT SUCH A BAD YEAR OR BUSINESS AFTER ALL

or a while, the summer of '98 looked as though it would be a real scorcher for business on Capitol Hill. Exporters fretted that House Republicans would block $18 billion in n cash for the International Monetary Fund to dispense to bled economies. Health insurers and employers were re- ed to a costly patient "bill of rights." And corporate lob- ts watched product-liability reform die—again.

ut as Congress begins a monthlong recess on Aug. 7 before nal rush to wrap up the year, prospects for such priorities IF funding are brightening. And business also bag small victories on issues that de an Internet tax ban, securities-liti- n relief, user-friendly job-retraining pro- is, and more visas for foreign high-tech ers. "It'll be a decent year," says Paul uard, senior vice-president of the Na- l Association of Manufacturers.

ie main reason Big Business is breath- easier is IMF funding: GOP leaders are ling that as one of their final moves be- adjourning in October, they'll accede esident Clinton's request for the full nt. Conservatives, led by House Ma- r Leader Richard K. Armey (R-Tex.), rying to limit the contribution to $3.4 n. But Corporate America's vigorous ing—and Russia's faltering economy— d carry the day.

rporate reps are also increasingly san- about dodging a bullet on HMO reform. ite House passage of a watered-down ge, the issue seems headed for a Senate filibuster. "I see how they'll get 60 votes for anything," says Arthur n, a lobbyist for insurer CIGNA Corp.

en if an anti-HMO bill squeaks through the Senate, it a Clinton veto. The President publicly opposes the GOP because it doesn't let patients sue their managed-care providers. But his real motivation is partisan. With polls showing voters angry at HMOs, Democrats would rather bash Republicans for doing too little than cut a deal.

Two top business goals, tax relief and fast-track trade negotiating authority, remain dicey, however. A House GOP push for tax cuts of up to $700 billion over 10 years is a nonstarter, given staunch Senate opposition. Even if both chambers agree on a scaled-back measure, most relief will go toward easing the "marriage penalty." There's bipartisan support, though, for targeted breaks for business, chiefly credits for research and development and stock contributions to foundations. A capital-gains cut and estate-tax relief will be tougher sells.

Brighter prospects after Congress' summer recess

"GAMES." Clinton could live with a modest cut of, say, $100 billion over five years, despite his insistence on safeguarding Social Security. With an election looming, "we don't want a debate in which Democrats are resisting tax cuts," says one party strategist.

But the President is loath to lift a finger to help Speaker Newt Gingrich (R-Ga.) revive a vote on fast track before the election because the issue is so divisive for Democrats. That's precisely what's behind Gingrich's push for a late-September vote. "This is nine-tenths political posturing," fumes Representative Earl Pomeroy (D-N. D.), who backed fast track last year but now leans against it. Adds G. Chandler Keys, chief lobbyist for the pro-fast track National Cattlemen's Beef Assn.: "This is too important to play games with."

Another fast-track delay will certainly disappoint business. But with IMF funding, a few other small wins, and no pesky regulation on the horizon, Corporate America can head for the beach without feeling totally sandbagged.

By Amy Borrus, with Mike McNamee and Paul Magnusson

CAPITAL WRAPUP

V BUDGET SHOWDOWN

ouse Republicans and President ton may be headed toward another rnment shutdown. Clinton has atened to veto some spending bills keep agencies running past Sept. OP leaders were prepared to drop s Clinton opposes. But he has d the ante, insisting on more mon- r education and job training. Now, OP, which was blamed for the -96 closings, must choose between essions that upset the right or a down that angers voters.

WANTED: AN FAA DEPUTY

► A year after becoming Federal Aviation Administration chief, Jane F. Garvey is still looking for someone to fill the No. 2 spot. Industry sources say five private-sector candidates have turned down the post, including former National Transportation Safety Board Chairman Carl W. Vogt and John J. Fearnsides, a senior vice-president of MITRE Corp., an aviation research and development company. The problem: The $118,400 salary is too low to lure outside executives.

CURBING MEDICAL-DEVICE SUITS

► Chalk up a victory for medical-device makers after years of lobbying. On July 30, the House and Senate passed a bill exempting raw-material suppliers of medical devices from liability lawsuits except in cases where the material was defective. The industry sought the change because patients often included deep-pocketed suppliers in injury suits, prompting the suppliers to get out of the business. President Clinton is expected to sign the bill, which already has cleared the House.

ASIA'S SOCIAL BACKLASH

As economies founder, popular rage threatens reform

PROTEST POWER: A KOREAN BANKER ON STRIKE IN JULY AT SEOUL'S DAEDONG BANK

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Special Report

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worst-case scenarios be-
plausible.

KOREA: RAGE AND DESPAIR

Will the economic pain spark a ruinous upheaval?

Shin Joong Woo isn't well versed in South Korean economic history. The wiry 35-year-old doesn't know why his country's debt-fueled economy ran off the rails. He doesn't know much about the International Monetary Fund's austerity program. The exhortations of President Kim Dae Jung to toughen up as the nation restructures and strives for "global standards" of economic efficiency ring hollow to him.

Yet Shin can tell you, and in gripping detail, all about his private Asian financial crisis. A year ago, Changdae Construction Co. provided him with enough work to support his wife and child, if modestly. Changdae went belly-up in January. He and his wife have since split up, and the child is with his mother in his hometown of Chongju. During the day, Shin trudges to soup kitchens around town. At night? It's back to the Seoul Railway Station, where he sleeps. "With the construction industry dead, a day worker like me gets pretty hopeless," says Shin.

Hopelessness, despair, and rage—there's plenty on hand in Seoul during this summer of economic anguish. You can see it in the eyes of the 600 unemployed who show up at Sosomun Park in the late afternoons for a free meal provided by a Buddhist charity. It spills out from the recently fired bank tellers and loan officers who have camped out at Seoul's main cathedral since late June. And it's evident by the squadron of riot police ringing the headquarters of Hyundai Motor Co., which on July 31 laid off 1,569 workers who declined its meager terms for early retirement.

Back in December, when the IMF agreed to bail out Korea with a $58 billion loan package, few would have guessed the pain would spread so far. What began as an abstract run on the won turned into a very real social trauma. And it will leave its mark on this deeply conservative population of 46 million long after the crisis is over.

Slowly but surely, Koreans are coming to realize that the old social compact of lifetime employment is probably gone for good. So, too, is the wild optimism of two years ago that Korea could catch up with Japan in autos, semiconductors, and other industries. As the economy makes the wrenching transition from a state-guided and paternalistic economy toward a more ruthless and market-driven one, high rates of joblessness and income inequality will be facts of life.

CULTURE SHOCK. It will also mean a greater presence of foreign investment and competition, something that won't go down easily given Korea's deep-rooted nationalism. When Microsoft Corp. announced in June that it would spend $20 million on a 19% stake in Hangul & Computer Co., a word-processing outfit, William H. Gates III was branded a "colonist" in local newspapers for insisting the company drop its local-language software product. The deal was called off. But given high debt levels in Korea's corporate sector, there simply is no way out except such sales to foreigners. Should Ford or General Motors prevail in an international auction to buy bankrupt Kia Motors, they will impose Western management styles on workers. It may be a blow to national pride, but South Korea can't afford otherwise.

Clearly, Korea is headed for its biggest culture shock in generations. The question is whether the new stresses and sense of betrayal will soon snowball into a social crisis. Nobody foresees the kind of rioting that left Jakarta in ruins. But the backlash could well thwart the badly needed reforms planned by the new government of Kim Dae Jung.

The most immediate flash point is labor. Some 40,000 workers spanning 60

KI HO PARK/KISTONE

unions walked off their jobs in a two-day strike that ended on July 16. Unions are threatening more and bigger strikes, which would devastate a decelerating economy. That prospect has Kim's government backed into a corner. It views wildcat shutdowns as illegal and threatens strikers and organizers with arrest. Such developments could turn violent, says Yoon Young Mo of the Korean Confederation of Trade Unions. "Once that line is crossed, we will move into uncharted waters," he warns.

Special Report

With any luck, the Korean attributes of self-sacrifice and social cohesion will allow Kim to push through the most painful aspects of reform. Yet based on interviews with Korea's jobless and its social workers, executives, and government officials, this much is clear: The pain on the street is real—and anger is building. For ordinary Koreans, who are fiercely proud of the economic strides made over the past three decades, the comeuppance has been harsh.

The sources of tension will increase over the next year. With bankruptcies soaring and the economy expected to contract by 5% this year, most private economists see the jobless rate, already 7%, hitting 8.5% and leaving about 2 million out of work. In this patriarchal society, most of the jobless are men, and those who have wives are also supporting an average of two kids and maybe an in-law or two. Economists at the state-run Korea Development Institute figure that, as the number of jobless grows, 9% of the population will soon see its primary source of income wiped out.

HYUNDAI STRIKERS

The work stoppage that ended on July 1 may be just a taste of labor actions to com

Take 27-year-old P Do Il. When he joi Daedong Bank in 1991, figured he was set for When the bank ran i trouble and pressured ployees to buy stock boost its capital ba Park went along. T the government s down Daedong in Ju His shares were wor less, and the bank div ed Park's severance pa age to pay back loans had taken out—leav him one month's salary live on. "I can't express my anger in words," he seethes. " government and the *chaebol* brought this crisis, and t are not carrying out any restructuring."

He has a point. The *chaebol*, through reckless investing borrowing, created Korea's meltdown. But they have pre much ignored widespread calls, and directives from Presid Kim, to dismember their family-run empires. The mass debt levels of the top five *chaebol* actually have risen s January. Instead of borrowing from banks, they tapped corporate bond market. The suspicion is that the *chae* are still funneling credit to insolvent or weaker subsidia even though cross-subsidiary financial assistance was lawed late last year.

DESPERATION. The government's ability to either rest ture the *chaebol* or provide for people like Park is limi Korea's safety net provides just four months of unemploym benefits and doesn't apply to small businesses. Seoul spend $5.4 billion this year on welfare, training, and pu works jobs. Mass firings by the *chaebol* are only beginn "The unemployment problem will get worse until the first of next year," says Ha Gap Rae, employment-policy dire at the Labor Ministry. Asset Korea Capital Management figures the average Korean has enough savings to last months. When that runs out, the pain will be acute.

Given the shame and stigma of accepting handouts, m are opting for lives of quiet desperation rather than see unemployment benefits. The nation's suicide rate jum 36%, year over year, during the first quarter, when an a age of 25 people a day took their lives. Most were white-

Where the Pain Bites Deepest

LOST JOBS

Korea used to boast of almost full employment, but the rate has soared to 7% and is headed much higher. Economists see 500,000 more out of work by yearend.

FAILED COMPANIES

About 90 companies go under daily. Bigger companies will vanish from the scene as financial-sector reform forces the shutdown of poorly managed banks and weak affiliates of *chaebol.*

LOWER WAGES

Many companies are cutting salaries, as much as 30%. Even unionized workers have accepted a wage cut, averaging 3%. And wages could plummet further.

LIVES LOST

The shame of layoffs has torn apart familie and driven white-coll workers to suicide. A average of 25 people a day took their lives in the first quarter—up 36% from a year earlie

orkers whose "loss of economic capability symbolizes the
of authority in the family," says Sungkonghoe Universi-
ciologist Kim Dong Choon. That change is tearing apart
ies, and the nation's low divorce rate of 16% is probably
g.

ue, the won has stabilized. And Korea's foreign reserves,
y much shot last December, have rebounded to a record
illion, so the risk of an external debt default is small. But
verhaul of debt-besotted banks and an overextended
rate sector has just begun in earnest.

oul already has burned through half of the $19.5 billion
side for buying out bad debts, just to close five relatively
banks. Plenty more need to be shut. And that means
corporate failures. About 10% of the companies listed on
Korean Stock Exchange have defaulted on debt pay-
s since January. Factories are running at 66% of capac-
s. 80% a year ago. The changes sweeping away the old
mic model are coming so rapidly that "in no other coun-try have you seen this sort of fast transition without a war," figures Hyundai Motor Chairman Chung Mong Gyu.

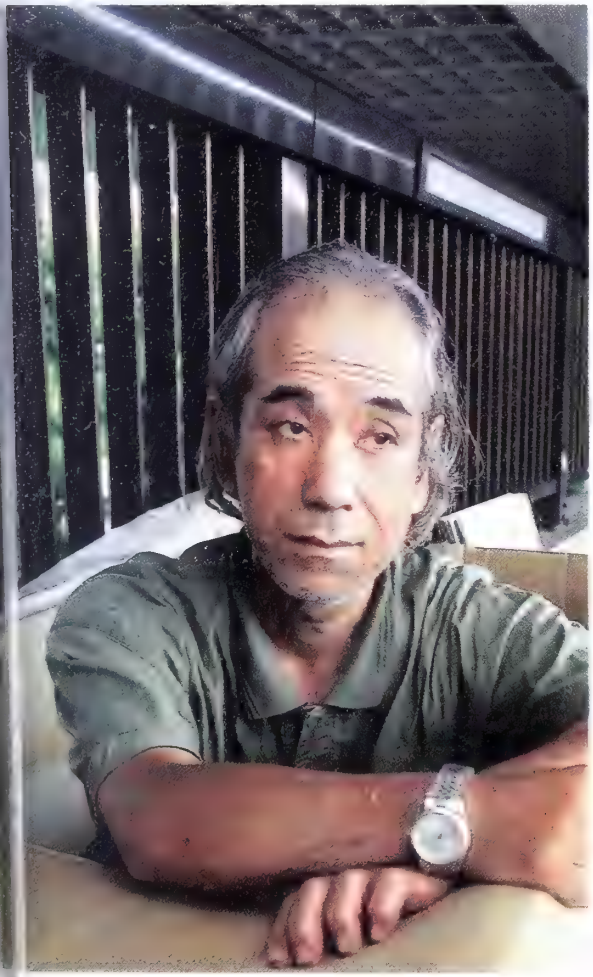
Even basic services are feeling the pinch. With Koreans loath to take on any unnecessary medical expenses, hospitals are reeling. At Seoul's 320-bed Hyemin Hospital, 4 of 27 staff physicians have been let go. Those remaining have seen their salaries slashed 20% and expect more pay cuts as management replaces experienced physicians with cheaper ones fresh out of medical school.

The most optimistic scenario for Korea is that as the country whittles down debt and closes money-losing enterprises, displaced workers will eventually get new jobs in a more streamlined, competitive economy. But getting there will require cool heads in the unions, the government, and police in the months ahead. Koreans can only hope order will prevail so they can rebuild their lives. For now, they will have to keep enduring a crisis that will not go away.

By Brian Bremner and Moon Ihlwan in Seoul

JAPAN: HIDDEN JOBLESS

n so many uncounted, the unemployment rate may actually be as high as 10%



OUT IN THE COLD

Ex-construction worker Ohashi hasn't told his family he has been living in a box

Masao Ohashi, 52, sleeps in a cardboard box under a Tokyo expressway and survives by eating only crackers and rice. Back in March, 1997, Ohashi's construction company, like thousands of others, went bankrupt. Since then, he has been looking in vain for another job. Despite 34 years of work experience, he can't even get hired to deliver newspapers. So he lives outdoors, only a 30-minute walk from where his niece lives with her family in the house where Ohashi was born. After more than a year, he has not told his family that he has lost his job.

Yet as bizarre as it seems, the Japanese government considers Ohashi employed. It regards anyone who works more than one hour in the last week of a month as having a job. The last time Ohashi worked was June 28, when he earned $59 by spending several hours moving a company's desks and chairs from one office to another. But he didn't register for help at a government unemployment office. For that, he would need a permanent address, and he is too ashamed to seek refuge at his niece's. Instead, every day, he folds up his cardboard home at 7 a.m. and tucks it under a bridge so the police won't find it. "No one here is counted as unemployed," Ohashi says, gesturing toward hundreds of homeless workers living in tents along the Sumidagawa River. "Some people here are not even considered human beings."

That Japan's invisible unemployed don't count says a lot about why the country continues to muddle through its worst recession since World War II. It also points to one of the biggest challenges ahead for Japan's new cabinet. On Prime Minister Keizo Obuchi's first day in office on July 31, the government announced that Japan's unemployment rate had hit a postwar high of 4.3%. Some economists and consultants estimate that in reality, Japan's unemployment rate could possibly be as high as 10%.

With economic anxiety venting

in recent elections and elsewhere, Japan's politicians face a dilemma. They must bring about enough reform to reshape the economy. But in doing so, they cannot inflict so much pain on the population that it causes a social backlash that will drive them out of office. "We have found that our system doesn't fit anymore," says Koichi Hori, head of Boston Consulting Group in Japan. "But no one has the guts to take the pain to restructure it."

Special Report

Some economists, analysts, and consultants argue that layoffs are good for Japan. They say companies need to scale down bloated payrolls and that the official unemployment rate needs to reach 10.5% in order for companies to regain the strength they had back in 1990.

Still, joblessness is taking a personal toll on millions of workers across all generations—both blue and white collar. The official unemployment statistics don't reflect the throngs of housewives too discouraged even to try to enter the workforce, college graduates waiting at home with their parents

for the economy to improve, and middle-age workers "temporarily" laid off until their companies recover. Some weeks, 900 people line up for the free noodles served out of blue plastic garbage pails on Sundays by a church in Asakusa, up from 550 a few months ago.

Others, rather than seek help, take their own lives. Last year, the National Police Agency tallied 3,556 suicides because of economic woes—a 17% increase over the previous year.

It's clear that layoffs are only going to get worse. Big corporations—including Kokusai Denshin Denwa (KDD) and Hino Motors—plan to shed hundreds from their payrolls through "voluntary" retirement schemes. Hino, Japan's largest truckmaker, has asked 200 white-collar workers, 2% of its workforce, to take yearlong paid leaves at 60% to 80% of their salaries, plus $347 monthly allowances if they enroll in job training. These employees technically still have jobs they can return to in a year. Yet with Hino's July sales down 35%, it would take a drastic improvement for the company to afford them. "If banks and places like KDD let lots of people go, then you know smaller and midsize companies are even worse off," says Hiroshi Okuda, president of Toyota Motor Corp., an 18.2% owner of Hino.

Many of Japan's jobless have little chance of working again soon. Of the thousands of managers who line up ev day at the government's "Hello Work" centers seeking ployment, only 5% will find work. Japan has a law against crimination based on sex or race, but the centers separate plicants by sex and by age to accommodate Japan's traditi seniority-based employment systems. And companies d want expensive managers who have been groomed all t lives in another company. "Younger people have a hig chance of finding a job," says center official Kazuaki Mish

For many, the center is their last hope. Tagashi Torami has gone every week since he lost his job driving buses December. But he hasn't found a job that pays more than of his previous salary. All he has is three more months of employment insurance. "After that, I'll accept anything, says. Senior employees can pect unemployment insurance 300 days at most. But most p time workers, who account 20% of Japan's workforce, a covered at all.

LITTLE HOPE

Day laborers jockey to have their job applications accepted

The government would like employed workers to start t own businesses in order to the economy. But with Jap debt-ridden banks—the sourc 45% of Japan's venture capit incapable of lending to risky s ups, that's not a viable optio

PROTESTS. In the meant some people are fighting to working. Mineko Nakata, 57 fuses to resign as superinten of a building run by a subsid of Itochu Corp., one of Jap largest trading firms. She worked for Itochu Housing for six years but was told in that her full-time position w be terminated in one month that she would have to vacate company-provided room. It decided it wanted someone could work three hours a da $7 an hour. "I cannot liv that," she said. So the company hired an older man to re her who could get by on that wage on top of his pen Nakata cannot collect on her pension for eight more yea with the help of a dozen people, she protests in fro Itochu's offices. "They cannot destroy her life," says f protester Terao Sonoumi, 36. Unfortunately, unless Nakat prove discrimination based on her sex, they can. It Housing Director Yoichi Ogawa counters: "We did not di her. We canceled our contract."

One quiet, bespectacled, 43-year-old computer prog mer probably represents the majority of white-collar wo After working for two years with a 30% pay reduct and then still being dismissed from the company whe worked for a decade—he feels so defeated that he wou just about anything to provide stability for his family won't risk his chances by giving his name, and he's tir hearing about Japan's high-tech promised land—he nee support his family today. "I want a job that will contin exist for the next 10 years," he says. "So I'm consid learning how to make keys. At least people will always that service." It may not be a brilliant career, but at lea a paycheck.

By Emily Thornton in T

PITCHING IN

Offerings from citizens to help Thailand repay its foreign debts

'HAILAND: ANKING HAOS

the government nationalize the system?

ad seemed Thai Farmers Bank was on the mend. In rch, the bank raised $850 million in an equity offering erved for foreign investors, who paid 27% over the rket price to snap up shares. With the funds, Thailand's argest bank hoped to retire bad loans. But since then, 'armers has reported a $100 million second-quarter s stock price has plunged 65%, and analysts expect it ve to return to the market to raise yet more money.

Thai Farmers is among the country's strongest banks. hould come as no surprise that the talk these days in ok is not whether a few of the smaller, weaker banks rvive. Instead, the question is whether any can be ed. "We are one step away from nationalizing the g system," warns Russell Kopp, a regional bank analyst dner Kleinwort Benson.

r desperation: There's no other way to describe it. ctories closing, unemployment soaring, and the finan- or crippled, Thailand is lurching into a contraction that rpass almost everyone's worst-case scenarios. Kopp s the economy will shrink by 20% over the next two "The system is not functioning," concedes Finance Minister Tarrin Nimmanahaeminda, who is pushing a plan to boost public spending and support to banks to prevent complete collapse.

If this weren't disturbing enough, a political backlash is building that could constrain Bangkok's ability to meet the crisis head on. Since coming to office in November, reformist Prime Minister Chuan Leekpai has enjoyed widespread support. But voters are eager to see some payoff from the painful measures meant to stem the crisis. Opposition politicians in parliament increasingly are denouncing the government.

Thailand's woes represent a disturbing new stage in Asia's crisis. As the first wounded Tiger to seek an International Monetary Fund rescue when its currency collapsed last July, Thailand has seemingly done everything right since Chuan and his team took office. They have closed dozens of finance firms, begun to privatize state enterprises, lifted curbs on foreign investment, and enacted a slew of reform laws.

WASTED TIME. So why, many Thais wonder, is the economy still sinking? Unemployment is likely to hit 8.5% by yearend. Sensing weakness, political rivals are pushing for another election. To stem an uprising, Chuan's team is trying to get the IMF to ease up on austerity. Tarrin and Commerce Minister Supachai Panitchpakdi want to run budget deficits equal to 3.5% of gross domestic product. Then they can invest in everything from rural roads to sugar mills. They also want to lower interest rates. "We wasted a lot of time on [the] clampdown on fiscal expenditures," says Supachai.

Tarrin also plans to unveil a bank-cleanup scheme. Jardine Fleming Securities estimates that nonperforming loans, now worth $12 billion, will rise to 47% of all bank debt within a year. Recapitalizing banks could cost $23 billion. The government may have to take over all but a handful of the country's 15 banks. But Supachai says any nationalization would be a temporary move "to prepare the banks for reprivatization." After the banks are cleaned up, stakes would be sold to foreigners.

The banking mess must be solved to get the economy moving. Consumer demand has collapsed, and factories are shutting. Supachai wants to stimulate the auto, agricultural, and construction industries through tax incentives and subsidies. But some executives are dubious. "I'm afraid it's too little, too late," says Vallobh Vimolvanich, vice-chairman of TelecomAsia, a joint venture between Charoen Pokphand Group and Bell Atlantic Corp.

Nor will it be easy to lower interest rates. Even though inflation is low, Thailand must worry about the baht. If it plunges again, warns Tarrin, "we will not hesitate to increase exchange rates." If that happens, the fallout could be so severe that he may not be around to devise another rescue package.

By Bruce Einhorn, with Ron Corben, in Bangkok

DYNASTIES

'I WANT TO LEAD WITH LOVE, NOT FEAR'

How Marilyn Nelson is putting her stamp on Carlson Cos.

Newly anointed as CEO of one of the largest private companies in the world, Marilyn Carlson Nelson is late. She has just landed at an airstrip near the Carlson family retreat in a woodsy corner of Wisconsin. Now, she's gathering her thoughts as her Chevy Suburban bumps along a gravel road, kicking up clouds of dust. The purpose of the trip: to address almost 100 human-resource executives from Carlson Cos.' enterprises around the country who have been summoned to the lakeside hideaway.

It's all part of the friendlier regime that Nelson is trying to bring about at the company her father, 84-year-old Curtis L. Carlson, ran with an iron fist for six decades. Carlson built a trading-stamp business into a travel-services and hotel empire with $7 billion in revenues. Best known are the Radisson Hotels and the TGIFriday franchises. But the holdings also include Carlson Travel Network, one of the largest players in the travel-agency market and a $750 million marketing and motivation-services business, which helps companies such as General Motors Corp. mount sales promotions.

Nelson, 58, who took over from her father last April, has been working overtime to put her own stamp on the company and transform its culture to fit her own style. After her speech and a quick visit to the stable to brush her riding horses, Glory B and Pride, Nelson is back on her jet, headed for a round of meetings at Minneapolis headquarters. Then it's on to host a dinner at her house for executives visiting from Carlson's British operations. Her day, which began at 4:30 a.m., ends after midnight.

Nelson is under intense pressure to set a steady course for the family empire after nearly a decade of turmoil. It won't be easy. Back in 1989, Curt Carlson made his other daughter's husband, Edwin C. "Skip" Gage, the CEO. But the two men fought bitterly and Gage left the company in 1991. Carlson next looked toward outsider Juergen Bartels. But he also took a hike when the patriarch micromanaged his affairs. Finally, Curt—who had never concealed his disappointment at not having a son—put Marilyn in charge.

Now, as the aging patriarch recedes into the background, Nelson faces a myriad of tricky issues. Her biggest challenge will be to keep family members allied behind her. Nelson's father still maintains 100% voting control of the company stock. But Curt Carlson has made clear that, after his death, he wants each of the surviving family members to have an equal stake in the company. Nelson figures nothing will keep the family together better than success. So she has promised to match her dad's 15% growth rate and to double operating revenues over five years, to $14 billion, by boosting travel-service operations in Europe and Latin America and by selling Carlson branded services to businesses around the world.

Next, Nelson needs to keep tabs on her 33-year-old son, Curtis C. Nelson, whom the family has picked to take over from his mother in 10 years. The younger Nelson, who has worked for the family since 1989, concedes working for his mother has been a ward. "It's been tougher for me th has been for her," he says. He is rently cutting his teeth on Carls hospitality unit, which brings in billion in annual revenues and incl some 360 Radisson Hotels franch and the company's fleet of five lu cruise ships. "He's gaining experi and coming along," says Carlson Financial Officer Martyn R. Redgr

FLEXTIME. With her son already ass the top job, Nelson needs to sell family executives on the idea that t is an important place for them in the company—and room to move She has already pushed for expa benefits and profit-sharing plans, including creating "phantom stock," a system of bonuses tied to revenue growth. As added perks, Nelson has introduced flextime and a day-care center. "I want to lead with love, not fear," says Nelson.

Although Curt Carlson no longer

THE FATHER

Founder Curtis Carlson, 84, is still the chairman. He and Nelson have had strong disagreements, but she says: "Nobody knows more about this company" than her Dad

MARILYN NELSON

Now in charge of the family-held Carlson Cos., a sprawling $7 billion network of travel agencies, restaurants, and hotels, Nelson, 58, finds far less time these days for riding

s on signing off on every deci-
he still isn't shy about disagree-
ith Nelson. She in turn, is wary
ng disrespectful, even though the
have battled often in the past.
e Nelson became CEO, her father
t with her about the bonus plan,
are, and the need to bring in
le directors. "I don't have to have
gnature," she says. "But I explain
I'm doing."

nning the family business was
Nelson's dream. Outgoing and
t, Nelson was a popular cheer-
in school. But she was also seri-
ough to edit the paper and sit on
tudent council. "She did every-
She really paved the way for
says Barbara Gage, who is two years younger and heads the family's charitable organizations. At Smith College, Nelson spent her junior year studying in Europe and toyed with the idea of becoming a diplomat but wound up instead as a securities analyst at PaineWebber Inc. in Minneapolis.

T

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Marilyn, in
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Later, after marrying Glen D. Nelson, a surgeon and today the vice-chairman of medical-products company Medtronic Inc., she settled into fund-raising for the Minneapolis Symphony and the local public television station and served as president of the United Way. All that, however, was a warm-up to what she considers her greatest coup in public life: In 1989 Nelson was head of a committee that persuaded the NFL to hold the 1992 Super Bowl in Minneapolis.

Local leaders say Nelson's fund-raising and stumping for civic causes was ubiquitous and invariably persuasive. "You can't say no to Marilyn," says former Honeywell Inc. CEO James J. Renier, who met Nelson when she was soliciting for United Way. Renier was prepared to turn her down. "Then she walked in and said: 'I'm so excited to meet you, I have goose bumps.' What was I going to tell her? 'You shouldn't have goose bumps?'" The approach was vintage Nelson: disarm and charm.

Nelson was considering deploying her charm in a run for the U.S. Senate. But, in 1989, her father pressed her into the family business, arguing that her talents were needed to keep things on track. His overture made her "uncomfortable," she recalls. "He said: 'If you care about this company, you'll do it.'" But Nelson was not quite so eager. "I had my own opportunities," she says. "If I was going to be in the company, I needed a role where I was allowed to make an impact." For starters, she wanted to chair the crucial audit committee. Carlson and Gage agreed, and she decided she would give it a try.

Using her position on the audit committee, Nelson discovered a serious lack of financial controls. In 1993, she helped recruit Martyn Redgrave from PepsiCo Inc. as chief financial officer. Nelson charged him with implementing a more sophisticated companywide accounting system akin to those for public corporations. She brought in other top execs from Sara Lee, Walt Disney, and Starwood Lodging. By then, in 1994, Bartels quit to head Westin Hotels.

BACKHANDED. It was soon clear that Nelson would be the next CEO. Now, she insists she has no problem with the backhanded way in which her father put her in charge of the family dynasty. And the departure of her brother-in-law, though it initially seemed disastrous, may help dampen rivalries within the family, she believes. Gage, who is still on the Carlson board, took a $600 million marketing business with him when he left to found Gage Marketing Group, now the No. 2 marketing-services group in the U.S. And one of his sons is now working with him, which means one less third-generation family member to compete within Carlson Cos.

THE FAMILY

At the table are Curtis Carlson, his wife, and daughters–Marilyn (left) and Barbara. Behind them stand their husbands with Marilyn's three children and Barbara's four

Marilyn Nelson vows that the family will finance more ventures for third-generation members of the clan. "Not everyone has to work for Carlson Cos. to work for a Carlson business," she says. And that, she's betting, just may help keep the family together for yet another generation.

By De'Ann Weimer in Minneapolis

MATHEMATICS

DO THE MATH —IT *IS* A SMALL WORLD

A formula that can make complex organizations simpler and more efficient grabs attentio

John Guare's play and then 1993 movie *Six Degrees of Separation* popularized the notion that we are all connected to each other by a chain of six people or less. That, in turn, spawned the pop-culture parlor game "Six Degrees of Kevin Bacon," in which players try to link virtually anyone in Hollywood to the ubiquitous actor. As the song at the Disneyland exhibit puts it, "It's a small world after all."

But there is a serious side to the six-degree phenomenon. Two Cornell University researchers have come up with a mathematical model that shows in far more sophisticated terms what a small world this really is. The model is essentially a recipe for turning any large network of components into a "small world."

This is more than an intellectual exercise: The small-world model could be used to improve the operational efficiency of corporate giants like General Motors Corp., speed up transmissions over the Internet, and explain how infectious diseases spread and nerve impulses are coordinated in the brain. The model "may also facilitate a faster diffusion of innovation," says Ivan Manev, a management professor at the University of Maine.

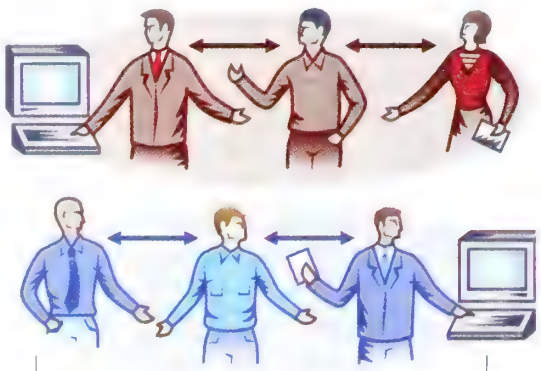
The key to turning a large world into a smaller, more efficient one is shortcuts: well-connected individuals or components that can cut across traditional boundaries in an organization. Duncan J. Watts, a postdoctoral fellow at Columbia University, and Steven H. Strogatz, a mathematics professor at Cornell, theorized that just a few well-placed individuals could dramatically spe up the flow of information in company, acting as emissar among floors and departme (table). When Watts and Strog did the mathematics, they disc ered that it takes only a very f random connections, or shortcu to make a small world out o large one. Once that world h been transformed, adding ad tional connections has little effe "The key is to link well-connect people from each level," s Boston University professor Jam J. Collins.

WIDE INTEREST. The model crea a buzz among mathematicians wh it was published in June in the entific journal *Nature*. "We've be swamped with interest by research who want to develop the small-wo network in their various fields," s Watts. The range broad—mathema cians, epidemiologis computer scientis marketing peop economists, engine and physicists among the many v have contacted Wa and Strogatz.

Watts says the work w indeed inspired by the " degrees of separation" c cept, a social theory devi in the 1960s by Stanley M gram, a social psychologis Harvard University. Milgr randomly selected people Kansas and Nebraska handed each of them a le addressed to people they not know in Massachuse They were asked to mail letter to an acquaintance would bring it closer to "target." Milgram discovered that each participant it took an averag only five intermediaries before the ter reached its recipient—mean

MISSING LINK

The key to an efficient organization is the creation of shortcuts between different levels.



1 In what researchers call a "locally ordered system," communication occurs only between people on the same level.

2 Random shortcuts can be introduced into such a network–that is, people meet members of other levels at the water cooler and pass along information.

3 Only a few such shortcuts are needed to create a "small world" in which information flows freely throughout the group. Productivity rises as a result.

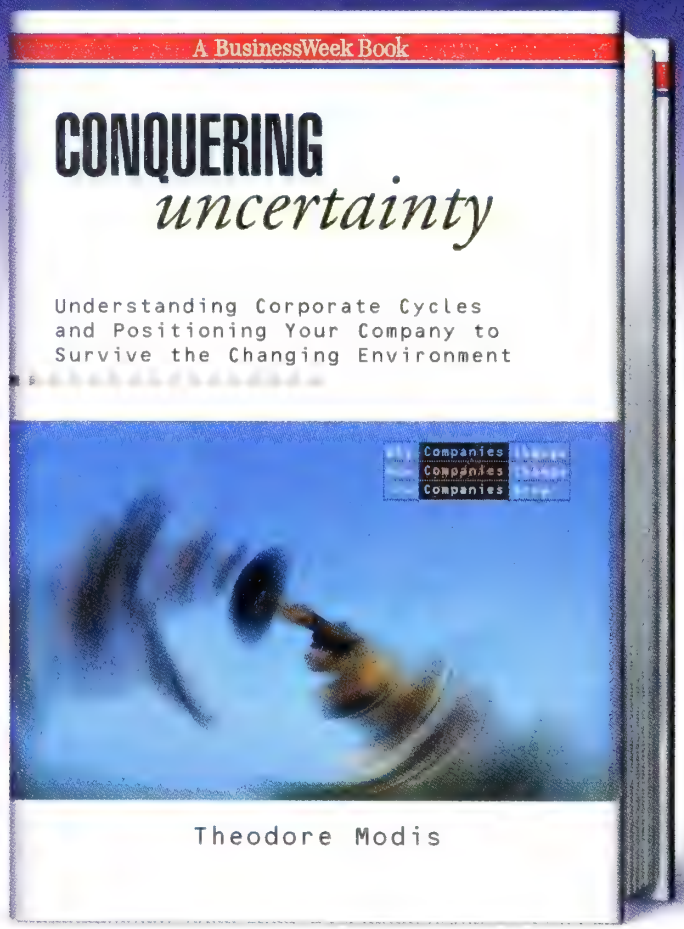
e were six degrees of separation
veen people in Massachusetts and
Midwest.
Vatts and Strogatz used experimen-
mathematics—an esoteric academic
pline that combines computer sim-
ons and mathematical analysis—to
nine two popular models of social
raction. One, which Watts calls the
eman world," assumes that each
on knows only those people in his
er immediate vicinity. In a second,
om world, each person is connected
eople scattered all over the world.
reality, most organizations fall
ewhere between those two ex-
nes—which is where Watts's and
gatz' mathematics comes in. They
ed with a caveman network, then
ed" the system like an old-fashioned
toward a random network. That
how they found out that only a few
ections were needed to turn a large
p into a small world.

MUNICATION GAP. To prove their
, the two researchers applied the
l to three different, fully mapped
orks—the nation's Western elec-
ower grid, the nervous system of
ematode worm, and the 235,000
s listed in the Internet Movie Data-
In each system, they found that
a few shortcuts had indeed pro-
l a small world.
ogatz and Watts say such thinking
help prevent catastrophes that
ultimately, from lack of communi-
n. As an example, they point to
orrendous explosion of the space
e Challenger on January 28, 1986,
killed all seven astronauts aboard.
ccident turned out to be the fault
O-rings that could not withstand
mperatures. An investigating com-
n discovered that low-ranking en-
's knew about a problem with the
rature-sensitive elements that
l the explosion but they couldn't
their concerns clear to the deci-
akers. Had there been shortcuts
en the engineers and the highest
officials, the disaster might have
verted, the researchers say.
Internet and the availability of
worldwide communication
gh E-mail is making our small
even smaller. Playwright John
hopes the process will continue.
ll our degrees of separation be in
digits" and "may we always be
o find the right six people," he
nd Watts and Strogatz have giv-
office gossip a new image—all
hmoozing just might be good for
ole organization.

By Nellie Andreeva in New York

Make chaos work for you.

Where others see only chaos, eminent futurist and business consultant Theodore Modis sees hidden patterns. Business, like the seasons, follows predictable cycles. In *Conquering Uncertainty* he shows you how to determine which "season" your company is in, and respond with the right strategy. By helping you anticipate the next phase of the cycle, his logical system brings perspective, order, and confidence to your decision-making, for both the long and the short term.



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ED BY JOHN CAREY

EADING OFF EARING LOSS THE PASSAGE

E EAR IS A MARVELOUS gan—but it's terribly nerable. Loud noises l some chemicals and gs can lead to the duction of toxins led free radicals that hair cells—and se hearing loss and ance problems. ne 30 million Ameri- s suffer from full or tial deafness, and million are exposed langerous levels of se at work. he problem is par- larly acute in the 3. military, where shots, jet engines, other noises have cted the hearing of of those on active , resulting in tment costs of more 1 $1 billion per year. low, military re- chers have an an- r. They have learned to deliver chemicals d antioxidants to ralize the free radi- and prevent dam- Scientists at the al Medical Center in Diego have devel- a tiny catheter that be passed under the rum and slid down e boundary between middle ear and the ear. That allows correct amounts of s to be pumped into rucial area. "It's ging the way we ap- h hearing loss," Navy neurologist ard D. Kopke. Kop- d co-workers have red hearing and bal- in several pa- —and larger clini- ials are planned. □

AT LAST, A CAR THAT CLEANS ITSELF

WHO HASN'T DREAMED OF A car or a kitchen floor that always stays shining clean? Kazuhito Hashimoto at the University of Tokyo might make that dream come true with a coating he says can clean—and keep clean—many different surfaces.

The coating's secret is the naturally occurring chemical titanium dioxide. Researchers have known that in the presence of strong ultraviolet light, titanium dioxide can decompose grime, turning it into substances that evaporate and blow away. Hashimoto found a way to boost the material's reactivity enough to work in normal light—by adding precise amounts of copper or silver.

In tests in Japan and Florida, one application of the magic coating was enough to keep cars clean for six months. A Japanese ceramics company, Toto Ltd., is making self-cleaning tiles for walls and floors and expects to start making the spray in September. And Hashimoto is developing a variation that could keep your bathroom mirror from getting steamy after a shower. *Nellie Andreeva*

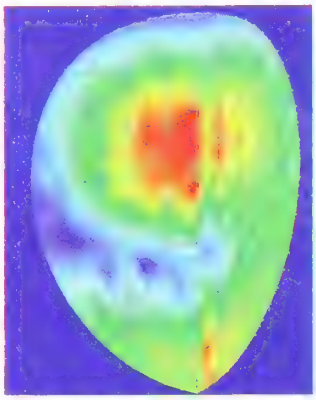
RAINY WEEKEND? IT'S YOUR FAULT

IF IT SEEMS TO RAIN MORE ON WEEKENDS, HUMANS MIGHT have only themselves to blame. A study by Randall S. Cerveny and Robert C. Balling Jr. of Arizona State University offers the first evidence that pollution is having a significant impact on the weather patterns of an entire region, affecting rainfall and the strength of hurricanes.

The two climatologists first collected data showing that "pollution is highest during the later part of the week and is lowest on Monday and Tuesday," says Cerveny, because both auto and industrial emissions are lowest on Sundays. Then the researchers looked for weather phenomena that also had a weekly pattern. They found two. Satellite measurements revealed that rainfall on Saturdays over the coastal waters of the Atlantic is an impressive 22% higher than on Wednesdays. "If you go out boating, you are much more likely to get wet on weekends," says Cerveny.

What's more, hurricane data also show a weekly cycle, the scientists report in the Aug. 6 issue of *Nature*. Storms that come ashore on the weekends are substantially weaker—with winds an average 12 mph slower—than those that land during the week. That may be because dirty air heats up more than clean skies, triggering more rain while reducing energy in hurricanes.

So, ironically, air pollution might be helping to protect us from nature's fury—even as it contributes to ruining our weekends. □



HOW TO PRESERVE THE ZIP IN ZAPPED FOOD

TIRED OF SOGGY MICROWAVED potatoes? Research at Cornell University promises to greatly improve the nuke-box's ability to make crispy, evenly heated food. Bioengineer Ashim Datta and graduate student Hua Zhang have developed computer models that map energy absorption and temperatures inside foods being microwaved. The models show that internal food temperatures can vary because of uneven heating. Such variations explain why eggs explode (the inside heats up first, putting pressure on the shell—see photo), and why some foods are hot on the outside while frozen inside (thawed outer layers absorb most of the microwaves' heat).

Datta and Zhang calculate that simple changes in the size and shape of various foods, along with instructions for placing food in the oven, can make microwaved meals far more palatable. The research also could improve prospects for sterilizing food with microwaves: Heating that is even could help guarantee that all bacteria are destroyed.

Datta plans to present the findings to microwave makers at a symposium in October. *Nellie Andreeva*

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THEN FOOD
THEY ARE USED IN
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WHAT'S THE DIFFERENCE BETWEEN A LITTLE KID WITH A WEB SITE AND A MAJOR CORPORATION WITH ONE? NOTHING. THAT'S THE PROBLEM.

Building a publishing-only Web site is the first step to becoming an e-business. A step that most businesses (and a lot of little kids) have already taken. That's fine as far as it goes – it's a very cost-efficient way to distribute basic information.

But the real payoff (for businesses, at least) comes with steps two and three. Step two is moving to "self-service" Web sites – where customers can do things like check the status of an account or trace a package online.

Step three is moving to transaction-based Web sites – not just buying and selling, but all processes that require a dynamic and interactive flow of information.

IBM has already helped thousands of companies use the Web to make the leap from being a business with a Web site to being an e-business – putting their core processes online to improve service, cut costs or to actually sell things.

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e-business economics are compelling. According to a recent Booz-Allen & Hamilton study, a traditional bank transaction costs $1.07; the same transaction over the Web costs about 1¢. A traditional airline ticket costs $8 to process; an e-ticket costs just $1. Customers love the convenience; management loves the lower costs.

IBM solutions have already helped thousands of businesses become e-businesses. To find out how IBM can help you do the same, bookmark www.ibm.com/e-business or call us today at 1 800 IBM 7080, extension NC32.

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MINOLTA

ICONDUCTORS

HIPMAKERS ADD UP HE CALAMITIES

acity glut, vanishing margins–and it's not over yet

ty the chip industry. It has long been beset by boom-and-bust cycles every three or four years. Then Asian government policies matters worse. Aiming to duplipan's takeover of memory chips 1980s, first Korea and then Tand Singapore hatched plans to cads of new semiconductor plants atter of national prestige, with litard for business realities. The re- huge worldwide capacity glut, eting prices, and vanishing mar- everyone.

, it could take at least 18 —and more than the usual of pain—for the industry to out of this downturn. Memory- ces already have plunged a stag- 97% since late 1995, and micro- or prices have fallen, on average, uring the past year. That will drive revenues for the overall semiconductor business down 12% this year, to $121 billion, say analysts.

It's not just about overcapacity. Also to blame are slowing sales of personal computers, coupled with the emergence of the cheap PC. For years, PCs have been the growth engine for the chip industry, gobbling up 50% of all semiconductors. But with consumers opting for cheap PCs—or none at all—that's added even more price pressure.

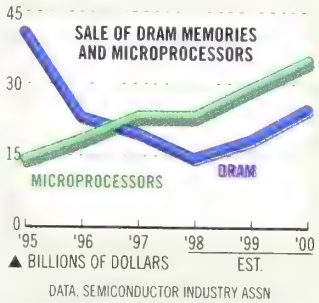
Indeed, this is not your typical semiconductor cycle. The shape of the business is changing. Over the next few years, the dominant role of PCs in driving the chip industry will decline, and a clutch of companies making chips for fast-growing telecommunications, data networking, and consumer-electronics markets will grow in importance. Today, these companies, including Texas Instruments and IBM as well as lesser-known PMC-Sierra, are the semiconductor industry's dazzlers.

To be sure, the chip business will eventually bounce back. Supply and demand will come into closer balance as capital spending on new chipmaking capacity declines 22% this year, to $29.5 billion, according to IC Insights Inc., a Scottsdale (Ariz.) consultancy. Pricing pressure will keep global revenues flat next year, but continued unit growth will prompt a 17% jump in global revenues in 2000, to $144 billion, predicts Integrated Circuit Engineering Corp., another Scottsdale consultancy. Signs of a turnaround could prompt a 20% to 25% rally in chip stocks, which have fallen by about one-third over the past year, says analyst Elias Moosa of Robertson Stephens in San Francisco. Still, he cautions, "the pricing environment will take longer to return to normal."

PERFORMANCE PLATEAU. That's not good news. For makers of microprocessors, the basic problem is that faster generations of chips don't deliver as much benefit to consumers as they used to. For one thing, there's not much whizzy new software that can take advantage of Intel Corp.'s fastest chips or MMX multimedia technology. The performance plateau is a major reason why International Data Corp. says that second-quarter global PC shipments slowed to just 7% from the same period in 1997. That's down from 10% year-over-year growth in the first quarter.

Intel, keen to stoke

BACK IN THE CHIPS?



DATA: SEMICONDUCTOR INDUSTRY ASSN

demand and fend off rivals Advanced Micro Devices and National Semiconductor, has been slashing prices on its Pentium II and low-end Celeron processors. But none of these measures is expected to do much for Intel's sagging earnings. Meanwhile, analysts have widened their estimates for rival AMD's loss this year from $30 million to $139 million because the company can't charge enough for its chips to make them profitable. And National, staring at losses, is asking its 13,000 employees to take 10-day unpaid furloughs to help the company save cash.

MEMORY LOSS. For memory-chip makers, the big problem remains too many plants. Staring at a dreadful year—a projected $7.5 billion industrywide loss on $12 billion in revenues—some are beginning to drop out of what has become the world's biggest poker game. On July 31, Siemens decided to close its Tyneside (England) memory-chip plant, which opened just 15 months ago. Meanwhile, Texas Instruments Inc., whose memory operations lost $222 million in the second quarter, dropped out of the DRAM business in June, selling the last of its operations to Micron Technology Inc.

No wonder all the Japanese companies are racing to cut reliance on memory chips in favor of high-value-added logic chips aimed at digital TVs, DVD players, and other consumer electronics. To accelerate development, Fujitsu Ltd. and Sony Corp. struck an alliance in January. Sanyo Electric Co. and IBM cut a similar deal on July 27.

Yet eroding profits will make it harder for many to diversify into the industry's few bright spots: specialized chips for data communications and audio/video gear, and so-called analog chips that give computers the ability to create sound and light for multimedia applications—specialties of TI and Analog Devices Inc. Analysts also expect continued growth from so-called fab-less firms that outsource their production, such as Altera Corp. and Xilinx Inc. Not only are these companies selling into hot markets, but they're also benefiting from fire-sale prices now being offered by contract manufacturers desperate to fill their factories.

Years ago, AMD CEO W. Jerry Sanders III quipped: "Real men have fabs." Now it seems that fabs are the biggest drag on earnings. At this stage, staying out of the chip-building game looks like the real manly bet.

By Steven V. Brull in Los Angeles, with Andy Reinhardt in San Mateo, Calif., and bureau reports

SEMICONDUCTORS

IT'S NOT EASY BEING CHEAP

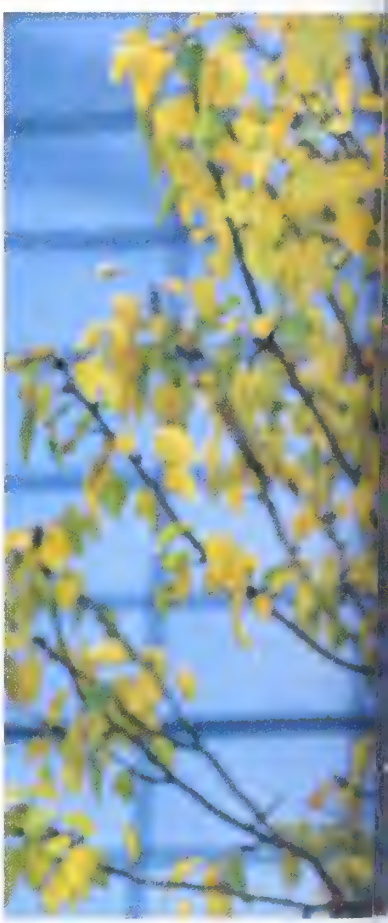
After early stumbles, Intel shapes up its low-end game

For a company whose credo is "only the paranoid survive," Intel Corp. was dangerously slow to respond to the low-cost personal-computer craze of the last 18 months. While customers opted for cheaper models, Intel focused mostly on the pricey high-end chips that made it one of the world's most profitable companies. Even its low-cost Celeron chip, unveiled to a chorus of crummy reviews in April, seemed more of an afterthought than a serious strategic shift.

Now, Intel is fighting back. On Aug. 24, it will roll out a new Celeron chip, codenamed Mendocino, that could boost Intel's share of the sub-$1,000 PC market. And to ensure it doesn't miss the next big thing, Intel has taken a radical step toward grabbing a bigger role in the market for "embedded" processors, the ultracheap chips used in cellular phones, TV settop boxes, and handheld gizmos. To do that, the company has tossed aside its famous bias for homegrown technology by using an embedded chip it neither designed nor completely controls—the StrongARM, a variant of the ARM processor created by ARM Ltd. of Cambridge, England.

PROFIT PUNCTURE. Has Intel Chairman Andrew S. Grove gone bonkers? Not at all. He's just facing up to the new realities. Thanks to the low-price boom, Asian flu, and slowing PC growth, analysts expect Intel's sales to fall slightly this year, to $24.9 billion, along with a gut-wrenching 25% drop in profits, to $5.2 billion—Intel's first year-over-year decline in a decade. The cheap-PC boom, admits Grove, "is broader and more profound than I thought last fall."

Worse, it now seems the double whammy of soft PC sales and falling prices could be around for years. Sales of more profitable $1,000-plus PCs are expected to grow just 10% annually for the next five years, while bargain basement computers will surge an average 55%, says International Data Corp. That's why Intel is heading downstream, even though processors for cheap PCs earn margins of just 50% vs. the 80% Intel gets on more powerful c



GROVE: *Intel may have picked up a in low-cost StrongARM technology*

It's also why Grove is eyeing what could be computing's next big wave: "information appliances." The Internet explosion, along with falling compo prices, is expected to fuel sales of phones and other handheld devices fewer than 5 million units this ye 43 million in 2001, says IDC. "Int going to need new opportunities," analyst Scott Miller of Dataquest "and appliances could be one of th

This new low-price plan won't

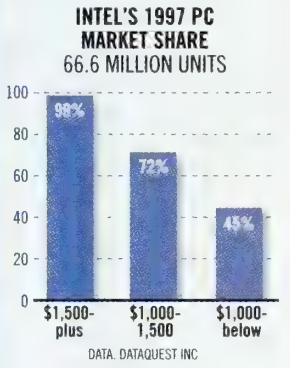
for Intel. In sub-$1,000 PCs, the aker has 45% market share—far its 99% lock on the $1,500-plus PC et. And the first Celeron chip helped much. A quick Band-Aid ntel's lack of a low-end product, on is a version of Intel's whizzy um II processor with the onboard ory stripped out. That left the on with sluggish performance—it's 20% slower than comparable Ad- d Micro Devices K6 chips, which he same. The result: Intel shipped 1 million Celerons in the second er, but rivals AMD and National conductor Corp. pumped 4 million into the low end, according to

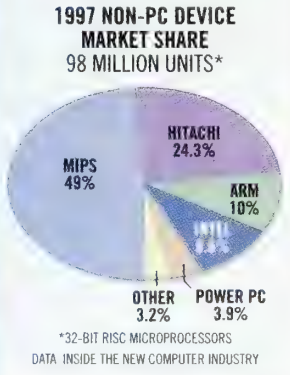
Prospects in the emerging information-appliance sector are brighter, since Intel seems to have picked up a gem in StrongARM technology. Acquired in a patent litigation settlement with Digital Equipment Corp. last October, StrongARM is considered by many the best version of ARM's hot-selling RISC chip design. Sales of ARM-based chips by licensees such as NEC and Samsung have exploded to 15 million units in the first half of 1998, up from around 7 million units all last year, says Mark Edelstone of Morgan Stanley Dean Witter. ARM-based chips power RCA Thomson's DSS set-top box, and will likely be the standard in smart phones: In July, giants

months after the DEC agreement, StrongARM languished while Intel waited for federal approval of the deal, which came in May. "Customers went dark on us," admits William N. Johnson, Intel's general manager for StrongARM. And in April, a dozen members of the Digital team that designed the StrongARM chip bolted to Cadence Design Systems.

Now, Intel is turning things around. The company says it has rebuilt the StrongARM design team to twice its former size. It also has new customers, including PC giant Hewlett-Packard Co., which plans to unveil a StrongARM-based mobile computer this fall, say insiders.

INTEL DOESN'T HAVE A LOCK ON LOW-END MARKETS





est. "The Celeron has been some- a disaster," says SG Cowen ana- ew Peck.

new version is winning high Its onboard memory and higher eeds zip up performance. Still, v Celeron won't rid Intel of its ow-end rivals. Analysts expect keep gaining share through the 1998 as it cranks up production 6 chips to 3.3 million units this Even after Intel gets up to full ion on the new Celeron this ias, Dataquest chip analyst Brookwood expects Intel's sub- c share to grow just one per- point per year through 2002.

Nokia, L.M. Ericsson, and Motorola committed to use the chip.

Today, StrongARM is a tiny fraction of total ARM sales. But with Intel's backing and a new version of Microsoft's Windows CE software for ARM due out this fall, it could become a frontrunner in handheld devices. With blazing speed and very low power consumption—and a price as low as $30, vs. $86 for Intel's cheapest Celeron—it's well-suited for battery-operated devices. "It's an incredibly fast piece of technology," says Albert E. Montross, CEO of Mylex Corp. in Fremont, Calif., which is making a computer storage device using StrongARM.

But Intel must act quickly. In the nine

But Intel has yet to prove it can cut it in the down-and-dirty appliance market. While PC makers line up to buy Intel's latest, most powerful processors, appliance makers require customized chips that aren't going to become obsolete every six months. They also don't care about the reams of PC software—Intel's biggest advantage in the PC segment. "In this market, Intel is like anybody else," says Lavi Lev, senior vice-president of engineering for embedded-chip rival MIPS Technologies Inc. And that's an unfamiliar place for the king of chips.

By Andy Reinhardt in Santa Clara, Calif., with Peter Burrows in New York

GRAPH BY GERRY GROPP; CHART BY ROB DOYLE/BW

TELEVISION

THIS LITTLE PEACOCK IS SHOWING SOME PLUCK

While it still has more flash than cash, MSNBC is nipping at CNN's heels

When Cable News Network aired and subsequently retracted on July 2 an investigative documentary on Operation Tailwind alleging the U.S. military used nerve gas during the Vietnam War, some irate viewers may have voted with their clickers. During July, an average of 593,000 households watched CNN in prime time, a drop from 680,000 a year earlier, according to Nielsen Media Research. That same month, CNN's upstart rival MSNBC, aided in part by its expanding distribution, increased its prime-time household viewership 144%, to 134,000 from 55,000.

Although they may have smelled blood in CNN's stumble, MSNBC executives say they already thought their competitor's market position had been vulnerable for quite a while. "If anyone was smelling blood," says Erik Sorenson, MSNBC's vice-president and general manager, "it was being smelled before Tailwind cropped up."

POPULAR SITE. Indeed, MSNBC has been gradually gaining ground as a player in the 24-hour news business. Backed by Microsoft Corp. and General Electric Co.'s NBC unit, the $500 million cable and online news venture is the cornerstone of NBC's elaborate strategy to prepare itself for the day when TV and the Internet are the same thing.

KEY TURF

MSNBC, with its high-tech gloss, draws the affluent 25-to-54 age group

Already, MSNBC is available in 42 million households, representing more than half the country's cabled homes, and has inked deals to be available in 61 million homes by 2001. Although its audience is still a fraction of CNN's, MSNBC is staking out territory among younger viewers that advertisers covet: 44% of MSNBC's prime-time audience was in the key 25-to-54 age group during the second quarter of 1998, compared with 24% of CNN's. "Make no mistake a it, they are being pressured by MS says Robert E. Igiel, U.S. broad director for Media Edge, the m buying arm of Young & Rubicam The MSNBC.com Web site, meanw has steadily increased its reach t point where it gets some 5 mi unique, or separate, visitors a m making it one of the top news s according to research firm M Metrix.

Despite its gains, rivals still di MSNBC as little more than a hobby

Rivals still dismiss the upstart network as little more than a hobby farm for Bill Gates

Microsoft chief William H. Gates nd a costly promotional outlet for which has made no secret of its to diversify outside of its sagging ork business. "They have spent ense amounts of NBC on-air pro- n time on MSNBC," says a CNN of- ABC News President David West- ently told a gathering of TV critics had ABC not ditched its own plans n all-news channel, it would be over $100 million a year. "From olic relations point of view, I think ves them an advantage," Westin of NBC. "I have yet to identify an- advantage."

hough they won't dis- its losses, NBC execu- insist MSNBC is on to break even ahead iedule in 2000, despite resence of a smaller player, News Corp.'s News Network. Based NBC's growing reach ecent valuations in ca- annel deals, NBC ex- believe MSNBC—not ng its Web site—is al- worth more than $1 . "It has more than ed the resources that gone into it," says t C. Wright, NBC's ent and chief ive.

le MSNBC positions work for a high-tech it is helping trans- BC's costly network nit into a viable busi- MSNBC is beamed out onverted warehouse ucus, N.J., hued in orange-tinted blues, that might oubled as a set in the film *Star- oopers*. Such NBC News person- as Tom Brokaw, Katie Couric, ne Pauley routinely show up on epackaged for MSNBC, which can rupted at any time for breaking n one of NBC News President v Lack's boldest synergistic MSNBC's hour-long *The News rian Williams*—which suffers of going up against CNN pow- *Larry King Live*—is aired n hour later on NBC's business channel CNBC. "We're getting a lue out of that program," says

alue Microsoft is getting out of is from both NBC's news resources and its marketing muscle. TV journalists sit side-by-side with MSNBC.com Webheads in Secaucus who feed data to an online newsroom in Seattle. Already, a mention on *Dateline NBC* to go to MSNBC for more information on a story can send 100,000 viewers to that site. According to Media Metrix, the share of home Web surfers visiting MSNBC.com has increased from 3.3% in August, 1997, to 4.9% in June. Archrival CNN.com had a 3.9% reach, while USAtoday.com had 2.6%. (CNN has separate news sites for sports, business, and politics, which it argues generate as much as 27% more traffic than MSNBC if measured together.)

MSNBC EDGES CLOSER IN TV NEWS...

NUMBER OF HOUSEHOLDS WATCHING*

	CNN	MSNBC	FOX NEWS
1998	288,000	90,000	36,000
1997	283,000	26,000	15,000

*24-hour ratings averages during second quarter

DATA: NIELSEN MEDIA RESEARCH

...WHILE BATTLING IN CYBERSPACE

NUMBER OF "UNIQUE" VISITORS TO NEWS WEB SITES DURING JUNE (MILLIONS)

ZDNET.COM	5.859
PATHFINDER.COM	4.5
MSNBC.COM	4.276
CNN.COM	3.971
USATODAY.COM	2.592
CNET.COM	2.098

DATA: RELEVANT KNOWLEDGE

MSNBC's appeal has been boosted by Microsoft's technological knowhow. One new feature, for example, allows local news, weather, and sports to pop up at the entry of a zip code. For now, however, online news is a commodity for which little is paid. The vision of a lucrative Web business tied to interactive TV has been slow to develop, says Peter Neupert, a former high-ranking MSNBC executive who recently left Microsoft. "It's going to take a lot longer than anybody expected," says Neupert, who is now chief executive of drugstore.com.

Pete Higgins, group vice-president of Microsoft's Interactive Media Group, concedes that although ad sales are growing at a rapid pace, profits are still a long way off. However, he says, the software giant is in this for the long term. "It's a core part of what we want to offer," Higgins says. "If you take an asset view of the world, we have built a great asset." Eventually, the goal is to provide what Higgins calls "truly personalized news," where consumers can call up a rich variety of text or video—at a price.

MARITAL TENSIONS. In the meantime, MSNBC's partners may find themselves with divergent interests. While NBC has invested in the portal Snap!, Microsoft has created a rival service, start.com. And just as Microsoft operates the personal-finance portal investor.com, NBC plans to pour resources into a CNBC.com portal. Another source of tension for NBC comes from its own affiliates. Alan W. Frank, general manager of NBC's Detroit affiliate WDIV-TV and chair of the network's affiliate-relations board, describes his reaction to promos on his station that direct viewers to MSNBC: "Wait a minute, we're televising something else here!" NBC recently offered the affiliates a small piece of equity in MSNBC, but those talks are preliminary, and most affiliates are said to prefer another form of payment.

Dealing with its owners and affiliates is one thing. MSNBC's biggest challenge remains its Time Warner Inc.-owned competitor, whom no one is counting out. Despite its tough July, CNN held its ratings while its household audience increased 10% during the first seven months of 1998 compared with 1997, according to Nielsen. CNN spokesman Steven Haworth also says that although ratings are down at CNN's *Headline News*, it still has the youngest viewers of any of the news services, MSNBC included. "It's getting camp to say: 'Let's go for a younger demographic,'" Haworth says dismissively. Since a full rollout of interactive TV is still years away, the true battle between these services has yet to be fought. But clearly, MSNBC has got its rival's attention.

By Richard Siklos, with Amy Cortese in New York

WOMEN'S TENNIS

VOLLEY OF THE DOLLS

Producer Arnon Milchan goes Hollywood with the WTA Tour

In late March, Arnon Milchan, producer of such hits as *Pretty Woman*, *L. A. Confidential*, and now *The Negotiator*, was taking a meeting at his house in Malibu. As the Pacific lapped the beach outside, the onetime fertilizer merchant from Israel announced his support for a remake of what for the past couple of years has been a very confused show: women's tennis.

By the end of the day, Milchan, who owns a 49.5% stake in the $1.4 billion production company Regency Enterprises, had the assembled tennis execs believing that maybe he wasn't just another Hollywood smoke machine. He pledged $120 million in a nine-year deal for the worldwide TV rights to the Corel WTA Tour—a "good script for the price," as he describes it. Milchan figures that by going Hollywood with the tour—and promoting the hottest-looking players—he can heighten the game's appeal and collect much more than he paid from TV outlets.

His timing may be impeccable. A gaggle of teenage superstars has burst onto the tour in the past couple of years and grabbed media attention. Sassy upstarts such as Martina Hingis, Anna Kournikova, and sisters Venus and Serena Williams have variously graced the cover of GQ, appeared on *60 Minutes*, posed for Annie Leibovitz in *Vogue*, and made the rounds of late-night TV talk shows.

SUDDEN SHIFT. By trading on their appeal and attitude, the women have been leaving men's tennis in the dust: In four of the past six Grand Slam finals, domestic TV ratings for women outpaced men. The women were just plain more interesting. And when Kournikova, a leggy 17-year-old Russian beauty, withdrew unexpectedly from Wimbledon this summer, a headline in the British tabloid *The Mirror* screamed: "Notice to all men: Wimbledon is over."

All this is a far cry from the recent history of the women's tour. Until F ruary, 1996, international TV rights w controlled by individual tournaments the tour made nothing on what was tentially the most lucrative segmer its business. The tour went without sponsor for all of 1995. In 1996 and of 1997, Corel—at $4 million a ye was the only source of sponsor reve

Internally, the tour was in shamble had run through three CEOs in a one of whom lasted only a day. It contract was set to expire at the er 1998, and it hadn't found a title spo to replace Corel. (It still hasn't, but CEO Bart McGuire now chinks the could command $8 million a year.) W more, a legal battle between marquee players and a pack of unknowns who had taken control of the players' association threatened the tour's very existence.

Enter Milchan (pronounced Millshawn). The producer had been hungry

MILCHAN IN MALIBU: *Entertainmen amateurs have been running tenni*

WHICH ONE IS NOT A SPICE GIRL? *Anna Kournikova (third from right) with the original group*

'YOU'VE GOT TO GIVE PEOPLE A SPECTACLE'

wenty-five years ago, in a defining moment for women's sports, Billie Jean ing beat Bobby Riggs in the Battle of the Sexes," which still olds the record as the most eavily attended tennis match in istory. Recently, King, founder f the Women's Tennis Assn. nd co-founder/director of the uPont World TeamTennis pro ague, talked with Senior Edir Ciro Scotti about the new rn women's tennis is taking.

KING *in 1973, when she beat Riggs and helped change the public perception of women's sports*

: *[Arnon Milchan] seems to want turn women tennis players into e Spice Girls of sports. Isn't that actly what you didn't want to do?*

: Oh, no. I don't care about that. ist the opposite. Why do you think let them carry me out on that litr at the Riggs match?

Q: *You think it's O. K.?*

A: Oh, absolutely. It's showtime. It's fun. You've got to give people a spectacle. The trouble is, the girls aren't going to be the Spice Girls and still win tennis matches. I've got news for you: Being a professional athlete is a full-time job. If they think they're going to be in movies and they're going to do their sports, they won't be able to maintain their performance level.

Q: *So the reason you go to a tennis match isn't to see a good tennis player, it's to see a sexy tennis player?*

A: Sex is a part of it. I mean, if someone is really good-looking... God bless 'em. They got lucky. They're going to get more. What I don't want is it to always be just the cute woman. I would like both. The only reason the good-looking women get recognized at all is that they're really good. Take [Anna] Kournikova. She would not be getting all this attention if she didn't play great tennis. She wouldn't.

sports property to complement ncy's recently acquired 25% stake e somnolent German sports brand . And he was flush from two oth- deals: In September, 1997, News 's 20th Century Fox Film unit it a 20% stake in Regency Enses for $250 million. And in June, ncy acquired a $600 million line dit.

y did Milchan pick tennis? For ning, he's a tennis fanatic. At 53, n plays at least three hours every ng and can slam a 90-mph serve. ore important, ever since watchnnis bad-boy Ilie Nastase in the he has thought of the sport as theater that could translate to the screen. "The people who have running the tennis business have been career people or amateurs—as far as understanding the entertainment side," says Milchan.

Milchan has wasted no time in bringing the hot lights to women's tennis. He arrived by private jet at the French Open with Arnold Schwarzenegger and at Wimbledon with Sean Connery. At the Cannes Film Festival, he chartered a 300-foot ship and invited Don Johnson and Mary Louise Parker to mingle with tennis sensations Serena Williams and Iva Majoli.

And he's also wasted no time hustling deals to cover the $13 million a year he guaranteed the Women's Tennis Assn. So far, he has signed a $3 million-a-year agreement with Eurosport, the ESPN of Europe, and is close to inking an estimated $1 million-a-year contract with another group of European broadcasters. He also has a $2 million deal with a Japanese outlet. But Milchan expects the biggest payoff to come from News Corp.'s vast empire—including Fox Sports Network, British Sky TV, and Australian Star Network. In the next few months, the tour expects to announce a sizable deal with ESPN and Fox.

LEONARDO AND BRAD. For Milchan, women's tennis is just another movie. And he likes to mull over possible scenes: On-court cameras flash the glamour girls on the screen and then cut to the audience, where Leonardo DiCaprio or Brad Pitt are taking in the action. "If I'm paying some guy $18 million to do a part, I don't think he'll say no if I ask him to come watch some games and have some fun," says Milchan.

To make the show a blockbuster, Milchan—like any producer—is counting on his actors. Some people, however, have a problem with turning a player like Kournikova, a legal minor, into a tennis vamp. "She's too young to be selling sex," says CBS tennis commentator Mary Carillo. "Some of the pictures of her really make me nervous—she's barely got anything on."

In Milchan's rush to remake women's tennis, he has little time for such concerns, though enthusiasm may occasionally cloud his thinking. He says he plans to use costume designers to outfit women players—no matter what brand of clothing they wear. And to better "stage" the game, he'd like to change the way it is scored. "Am I dreaming?" Milchan asks, laughing. Uh huh.

By Brad Wolverton

"I beat you so easily," Hingis once told Kournikova, who countered: "But I'm so much more marketable"

GOLF

DOES SAMSUNG CONTROL SE RI PAK?

Her ties to the conglomerate may complicate endorsement deals

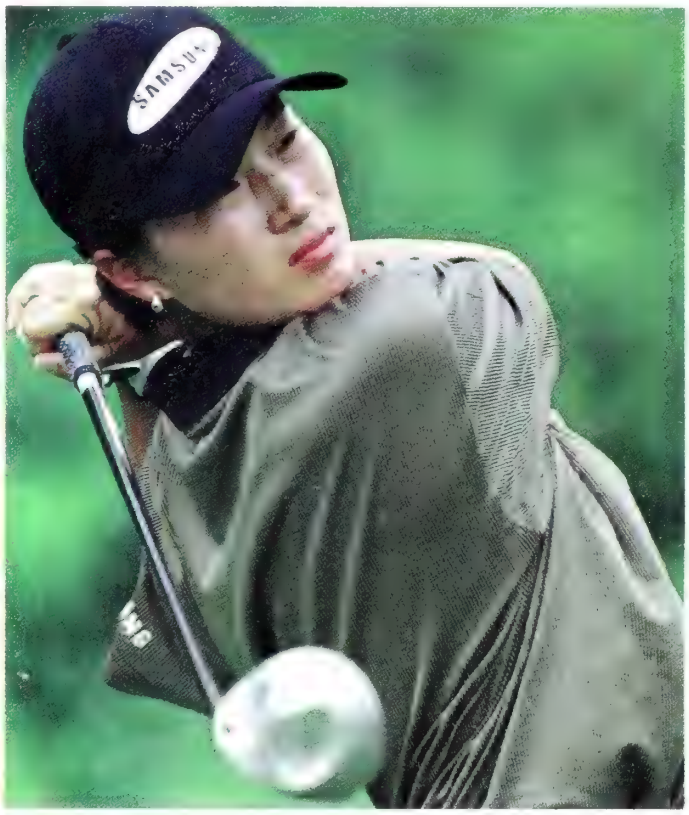
Hand-made sign spotted at a recent LPGA golf tournament: "Tiger Out, Pak In." The hottest golfer on the planet this season isn't the guy who dresses like he's been dipped in a bucket of Swooshes. Tiger Woods, despite the hype, has but one win in 1998. Now—in case you've been stuck on Ken Starr's grand jury all summer—it's 20-year-old Se Ri Pak of South Korea who is suddenly setting records and pushing up TV ratings.

After sweeping to three victories—including the prized U.S. Women's Open—in a torrid stretch during July, Pak went from unheralded to practically unbeatable. Her four wins this year, including two major titles, are the most by an LPGA rookie in 20 years.

For any other pro golfer, that performance would mean an avalanche of big-money endorsement contracts. But Pak has problems: She's a woman golfer, her English is a work in progress, and she seems tethered to Korean conglomerate Samsung Group.

Corporate America has long overlooked Ladies Professional Golf Assn. players, preferring to hire the stars of the PGA Tour. Says Rick Burton of the Warsaw Sports Marketing Center at the University of Oregon: "In all the years the LPGA has existed, no one has broken out" as a product endorser.

Still, Pak is off to a promising start. During last month's U.S. Open, Pak, her parents, and her business manager, Sung Yong "Steven" Kil, held meetings with several major golf manufacturers, among them Callaway Golf and golf ball maker Maxfli. But negotiations have moved slowly, in part, because of confusion over who speaks for Pak. Kil, who also acts as driver, scheduler, and travel agent, is Pak's second representative this year. A third, said to be IMG, the Cleveland-based sports-management giant, appears to be on the way.



PAK POWER: *She is stoking interest in women's golf*

Whomever Pak chooses can expect to be on the phone daily to Seoul, headquarters of Samsung. "The position of manager of the professional golfer is quite important, not only for the player but also for the sponsoring company," says Raymond Yoon, director of corporate strategy for Samsung America. Pak's relationship with Samsung is close and complex. She wears its logo on her hats and slacks. And she is about to debut as spokeswoman and model for Samsung's golf clothing line, Astra, expected in U.S. stores next spring.

Samsung is paying millions to Pak, but how many millions over how many years isn't clear. Recently published reports say Samsung renegotiated Pak's deal after her string of victories a now is paying her $3 million a year three years. Not so, says Yoon. He ma tains that Pak's basic contract—estim ed to be as high as $1 million a y for 10 years—"cannot be changed." Yo adds, however, that Samsung is d cussing ways to compensate Pak for l remarkable play.

Samsung's ties to Pak go way ba According to Yoon, Samsung Chairm Kun Hee Lee watched Pak develop game at a Samsung-own course near Seoul. Lat company officials arranged her to go to Florida where Samsung's expense, trained under famed golf structor David Leadbette

Few doubt Samsung's r jor role in bringing out best golf in Pak. But sc LPGA observers won whether she would be bet served by making more her own decisions. Two we ago, a weary Pak compe in her sixth consecutive to nament, the du Maurier C sic in Windsor, Ont. She ished a disappointing 13 sh behind the winner and he ed home to Orlando for w she thought would be a w of relaxation. But Samsu had scheduled a three- photo shoot in Orlando. flash, Pak's week off vanis "That was a shame. She exhausted and really looki forward to a break," says mer LPGA star Jane Blal who worked as a TV co mentator at the du Mau "If she continues to be d nated by outside forces, things wil very difficult for her."

For now, however, Pak seems t bearing up under the pressure. Sh popular with her fellow players. And has charmed the media with her esty and memorable quotes, delive in improving, yet halting, English. (C menting on a cheering gallery, Pak served: "They make big loud.") Per Pak's greatest impact so far has in stoking interest in women's golf. month, three tournaments in which played set attendance records. clearly enjoys playing, and our fans ly enjoy watching her play," says Commissioner Jim Ritts. There' question that Pak, as the sign sa "in." What's less certain is when she in the really big money.

By Mark H

Earth Shakers.”

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–Julie Sizemore
Thompson Creative
Dallas, TX

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MANAGEMENT

CENDANT: WHO'S TO BLAME?

A loose accounting culture may lie at the core of the debacle

In all the hoopla over questions about former Cendant Corp. Chairman Walter A. Forbes's travel expenses, it's easy to lose sight of one telling detail: Cendant officials can find only a limited number of Forbes's expense reports and so can't verify how a substantial amount of those funds were spent. Forbes, who resigned on July 28 as investor anger rose over the company's accounting scandal, is now under fire for more than $1 million in expenses for which he was reimbursed.

While the expenses may in fact prove legitimate, the incident provides a glimpse into the loose financial controls of CUC International Inc., which Forbes merged with Henry R. Silverman's franchise giant, HFS Inc., last year to form Cendant. The continued battle over CUC's accounting also shows how deep the animosity within Cendant remains.

Today, four months after the scandal first broke, people close to Silverman says he still exudes a deep sense of personal outrage. Now, the question is whether Forbes, the man many hold accountable for the problems, will keep his nearly $50 million severance package. If Cendant's accounting investigation finds significant expense irregularities, he may be forced to give that up.

COLLEGIAL ATMOSPHERE. Forbes has repeatedly denied all knowledge of accounting shenanigans within CUC businesses. He maintains his expenses were appropriately billed to the company and has promised to provide a full accounting. He declined to comment on CUC's controls until an investigation by Cendant's audit committee is complete. Silverman also declined to comment on the controls.

CUC was long known for its collegial and informal atmosphere. But four individuals close to Cendant and its board, who all declined to be quoted, say that relaxed culture also had a downside: They say CUC's financial controls were lax and insufficient for a company of its size. At the root of the accounting problems, claim the sources: CUC's financial oversight did not mature as its business grew into an enterprise with sales in excess of $2 billion. The lingering question, some of those sources say, is whether the loose controls at CUC were a function of the company's fast growth, or whether they were left intentionally weak to hide questionable accounting.

Intentional or not, the price of CUC's laxity is staggering: Cendant says that 60% of CUC's net income for 1997 simply did not exist. The ongoing investigation has shown that the effect on Cendant was to inflate its net income before charges in 1997 by up to $250 million. The Securities & Exchange Commission and U.S. Attorney's office in Newark, N.J., are investigating, Cendant says.

While there is no evidence Forbes had a role in what Cendant has described as fraud, he appears not to have put adequate checks and balances in place at the booming CUC. For one thing, CUC's internal auditors were based in Nashville, far from the company's main Stamford (Conn.) office. And one of the sources close to Cendant says much of that group's work focused on examining operational questions such as how to improve the efficiency of certain businesses, rather than verifying CUC's books and accounting practices.

One source familiar with CUC's accounting denies the auditors' dist was a problem, because they regu met alone with the CUC board's a committee and outside auditors Ern Young, and they had the freedom to into what they wanted.

However, outside experts say such an arrangement could have u mined their role as financial watch "Internal auditors should be at h quarters, where they are close to board and top executives," says J H. Carley, an accounting professor a Wharton School. "And their first pr should be financial matters."

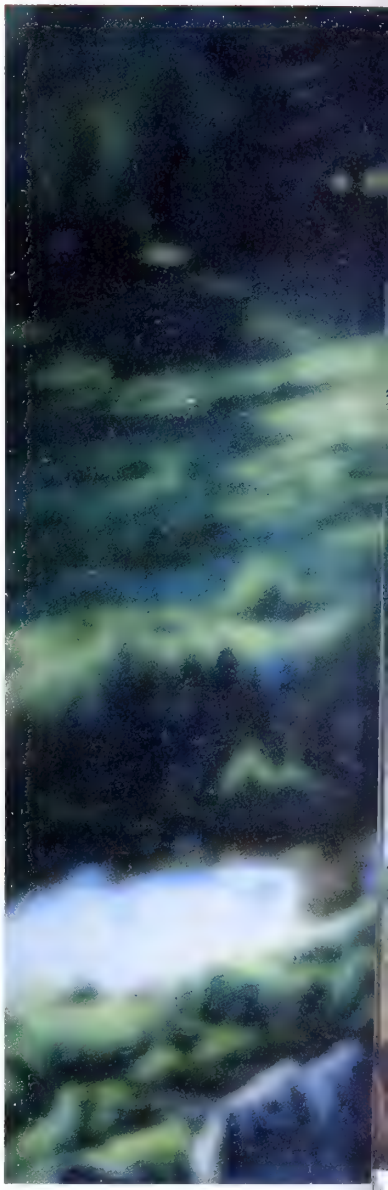
At the same time, CUC's accou systems were far from cutting-edge cording to one person familiar w July 27 briefing conducted for the b of Cendant's audit committee by A Andersen & Co., which was hired t

QUESTIONS OF CONTROL

Sources close to Cendant say loose financial oversight may have contributed to questionable accounting at CUC International.

▶ A marginalized audit team—based hundreds of miles from the company's Stamford (Conn.) main office—wasn't focused on verifying accounting practices.

▶ Inadequate accounting software required most revenues and expenses to be manually entered when preparing financial statements.



The former CEO says the $1 million-plus in private jet and hotel expenses that he incurred was "justified"

FORBES: HIS SEVERANCE MAY BE IN PERIL

ıe accounting mess, CUC had not in the kind of highly automated ıg system used by many large es, including HFS.

those automated systems, rev- ıt should be recognized over a 2-month period, for example, ıtomatically be coded to hit the statement under that schedule. UC, the accounting department off software that required most and expenses to be manually when preparing financial state- That's a big job to do manually," Ciesielski, publisher of the *Accounting Observer*. "In theory lo it right, but you have to have checks and balances. Why you want to automate some- important?"

ot clear whether such issues were flagged by Ernst & Young. Ernst & Young says its audits of CUC's financials were done in keeping with professional standards but adds that auditors may not be able to find fraud. Given the magnitude of the apparent fraud, it's not surprising that the firm declined to comment on CUC's controls, saying it may be named as a defendant in litigation surrounding Cendant.

In fact, even after the merger of HFS and CUC, the discovery of CUC's accounting problems may have been delayed by an unusual arrangement. Under the terms struck by Silverman and Forbes, CUC and HFS financial reporting operations were to stay separate for a while. But Silverman's team began raising questions in late February about the quality of information it was getting from Stamford.

Silverman reassigned several CUC financial executives with Forbes's agreement. Shortly after that, Cendant chief accounting officer Scott Forbes—no relation to Walter—and another executive went to Stamford to meet lower-level accounting managers from the former CUC. Those managers revealed some questionable practices, including accelerated recognition of revenues. The revelations quickly triggered the current investigation.

That inquiry now has also put Walter Forbes's spending under scrutiny. According to one source close to the board, internal auditors from Silverman's team and Arthur Andersen have raised questions about a series of expenses Forbes billed to the company from 1995 through the first quarter of 1998. Cash advances totaling nearly $600,000 were made to him, for example, but Cendant officials have found no formal expense reports to show that the money was used for business. Forbes says that he often spent his own funds on business and that those cash payments were reimbursements. He says he generally filed expense reports weekly, adding, "all my expenses were justified."

JET TURBULENCE. The greatest scrutiny, for now, is on Forbes's use of private planes. Forbes owns shares in two jets for which he personally pays a monthly fee plus per-hour charges. Use of the planes for company business would be billed to CUC. But sources close to Cendant say the hourly charge on trips billed to the company was sometimes as much as twice the market rate for those two jets.

Forbes denies that any charges for the planes were out of proportion. He says the charges factored in the total cost of his share in the jets, and that all travel billed to the company was related to business. Moreover, he says the arrangement was approved by the compensation committee of the CUC board.

More troubling: Forbes wrote a memo last year requesting reimbursement for $596,000 in air travel expenses from 1995 and 1996. According to two sources who have seen the memo, it contains a handwritten note across the bottom indicating that the expense should be charged to the merger reserves related to the HFS deal. Such expenses, Cendant officials confirm, are not likely to be appropriate merger charges. Two sources close to the board say the presence of such an instruction on Forbes's memo raises questions about whether he may have known of some of CUC's improper merger accounting. Forbes says the travel charges were legitimate expenses, that he has not seen the notation on the memo, and that it is not his handwriting. He also says he never directed anyone at CUC to set up any merger reserves.

If Forbes cannot document that the travel and cash advances were proper, Cendant's board may try to reclaim his nearly $50 million severance payout. And Forbes could wind up paying a dramatically higher price for weaknesses at the company he created.

By Amy Barrett in Philadelphia

COMMENTARY

By Jennifer Reingold & Amy Barrett

M&A FRENZY MAY BE SCUTTLING DUE DILIGENCE

Are there any more minefields out there? Stunned investors are gathering their wits following the spectacular blowup of Cendant Corp., the company formed last year by the merger of HFS Inc. with CUC International Inc. As Cendant's stock has collapsed amid allegations of false revenue creation at CUC, investors are beginning to wonder whether the frenzied race to do deals has left proper due diligence in its wake. "As the pace of these types of transactions quickens," says Abe Mastbaum, chief financial officer at American Securities, an investment firm, "it's likely that things will be missed."

He may be right. Even in the best of times, due diligence may not cover all the bases investors assume it does. And for those who like their accounting conservative, these are hardly the best of times. Thanks to a host of reasons, companies appear to be slipping when it comes to carefully checking their new partners' books. Along with the record number of mergers, the prevalence of deals done with overpriced stock and the rising popularity of "mergers of equals" are also big factors. The upshot: Ferreting out a bad deal may be tougher than ever—and when problems arise, investors may pay the price.

HIGH STRESS. Start with the sheer speed and magnitude of the wheeling and dealing on Wall Street. M&A activity is hitting record levels: According to Securities Data Co., 6,300 deals worth a walloping $1.1 trillion have been announced this year, up from the $913 billion in deals done in all of 1997. And many of those megadeals are being put together in barely a week. As a result, bankers, consultants, accountants, and lawyers are under pressure to do their due diligence as fast as possible. Says Jack Levy, global head of mergers & acquisitions at Merrill Lynch & Co.: "The level of M&A activity is clearly stressing the system."

But even in a stress-free system, due diligence may not always find the skeletons in a company's closet. While there's no shortage of critics asking "where were the accountants and investment bankers?" after a failure like Cendant's, in truth there is no agreed-upon definition of proper due diligence. Normal standards have never required that every scrawl in the ledger be de-

SCRUTINY-FREE?

In a "merger of equals," asking to see the books can kill a deal. And in stock trades, dealmakers often do less research

coded. Unlike an initial public offering, where nearly every rock is turned over, trust plays a big role in public company mergers. "There are a lot of value judgments, depending on the speed [of a deal]," says Benjamin W. McCleary, a partner at investment bank McFarland Dewey & Co.

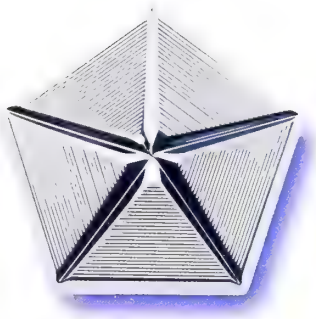
This means that in a deal involving a public company, due diligence starts with the assumption that its audited figures are accurate. Lawyers review contracts and liabilities, while bankers plug numbers into financial models to verify projections. But M&A specialists say it's pretty rare for an acquirer to go much beyond the published financials and scrutinize the internal books.

The recent popularity of "mergers of equals"—in which CEOs agree to share power and work out the rest later—may be exacerbating the problem. Because both sides are sticking around, the need to get along until the deal is done predominates. In part, that's about trust, but at base, it's about power: Since no one dominates, a demand to see the other's books can kill a deal. "There is less o ficial due diligence," confirms a senio partner at one Big Five accountancy. "Companies are in the same market the executives know each othe and how they behave reputa tionally. They believe that is their due diligence."

Moreover, the market continued strength over the past few years has increased the pressur even with normal mergers and acqui tions. That's because more deals are being done wi stock, and everyor is rushing to get in on the action while they can still use supercharged shares as their currency. But financial pros say that when hig flying stock is on the table rather than cash, dealmakers are often less careful. "In a stock deal of two larg public companies, you will do a less intensive investigatory process than you are doing a cash deal," says one banker.

Will the Cendant debacle put mo emphasis on careful analysis? James E. Grefenstette, senior portfolio ma ager at Federated Investors, which owned 275,000 Cendant shares until recently, certainly hopes so. "I'm su Silverman is not going to trust the next set of books he sees," he says. But given the spate of recent deals and the continuing pressure to act the damage may already be done. "We are going to see more... deals that turn out to be busts, in part b cause of a lack of due diligence," sa Mark L. Mitchell, visiting associate professor at Harvard business scho Investors, you may be on your ow

Management editor Reingold an Philadelphia bureau chief Barrett have followed the Cendant saga.



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ANTITRUST

MICROSOFT TAKES THE STAND

It readies an E-mail trail aimed at proving the Justice Dept. dead wrong

When the U.S. Justice Dept. sued Microsoft Corp. in May, it packed its legal papers with details of the dirt the agency had uncovered in its nearly two-year investigation of the company. Justice cited explosive witness testimony, for example, charging that Microsoft traveled to archrival Netscape Communications Corp.'s headquarters in 1995 and proposed illegally dividing the browser market. The agency also quoted dozens of internal Microsoft E-mail messages and public statements in which executives threatened to, among other things, cut off Netscape's "air supply."

Now, the software giant is getting a chance to fire back. On Aug. 10, the company is expected to file not only its first detailed defense but also a motion for summary judgment asking U.S. District Court Judge Thomas Penfield Jackson to dismiss the case without holding a trial.

Using their own collection of E-mail messages and memos, Microsoft's attorneys hope to demonstrate that Justice's portrayal of the company is dead wrong. Rather than illegally trying to drive Netscape out of the browser business, as trustbusters allege, Microsoft will offer evidence that it was simply trying to give consumers more for their money. "For Microsoft to say they want to win—that's what competitors are supposed to do," says Charles F. Rule, a former Justice Dept. antitrust chief who is now a legal consultant to Microsoft.

Based on information from court documents and interviews with people who are familiar with the company's legal strategy, Microsoft will use its mid-August court filing as an opportunity to tell its own version of the history of the company's Internet-development effort. Refuting Justice Dept. claims that Microsoft wrapped a Web browser into its Windows operating system with the aim of crippling Netscape, Microsoft hopes to demonstrate that it planned on adding Internet browsing into Windows before Netscape even existed. Microsoft will also attempt to show that Justice has quoted many internal E-mail messages out of context.

The Justice Dept. declined to comment, but in a court filing last year the agency said that "Microsoft's description of its intention to include browsing functionality in Windows 95 'in late 1993 and early 1994'... is simply false." Justice argued in that document that Microsoft's early plans to add Internet capability to Windows were not concrete and did not include several important technologies. Additionally, the agency contended that other internal corporate documents, some written as late as 1996, indicate the company viewed its Internet Explorer and Windows 95 as separate products.

E-MAIL: IT'S MICROSOFT'S TURN

One of Microsoft's key arguments in its war against the Justice Dept. will be that the company planned on integrating Internet technology into Windows before rival Netscape was created in April of 1994. Some of the internal E-mail it may use to back this up:

> "I think we could really popularize [Windows 95]... if we could say [it's] the greatest front end to the Internet"
>
> — STEVE BALLMER, then head of sales, in a Dec. 7, 1993, message to CEO Bill Gates

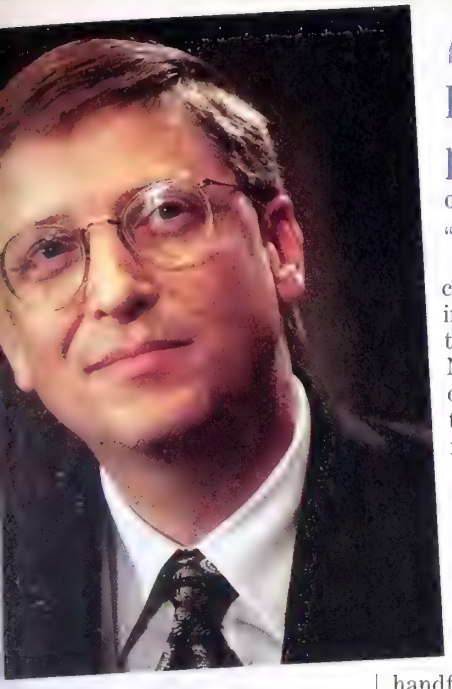
In the world according to Bill Gat Microsoft's Internet odyssey began 1993. That December, four months b fore Netscape's predecessor compa Mosaic, was even incorporated, sa and marketing chief Steven A. Ballm sent Gates an E-mail wondering if t company should focus on the Inter when assembling Windows 95

then code-named Chicago.

"I think we could really popula Chicago... if we could say [it's] t greatest front end to the Intern wrote Ballmer, who is now the com ny's president.

In an E-mail that addressed iss raised by Ballmer, engineering mana Cliff Bamford on Dec. 16, 1993, arg that an Internet browser should be p of the operating system. "An Inter product will really need to be a serie integrated products," Bamford wro

At the same time, a handful of Mi soft's engineers were up to their elb in Internet technologies. Networl engineer James Allard had for mo



> "Now I assign the Internet the highest level of importance. It's critical to every part of our business" BILL GATES, to the executive staff on May 26, 1995, three months before Windows 95 shipped. From a memo titled "The Internet Tidal Wave"

ıed of adding standard Internet ırking, search, and document-pre-ion technologies to Windows, turn- into "[the] next killer application Internet," according to a memo ıt to Microsoft's product develop- managers in January, 1994. His specifically detailed how browsing ology should be added to the op- g system.

rosoft's Internet push got under ı earnest on April 6, 1994, when and 20 product-development man- and engineers spent an entire day g it over at the historic Shumway n in Kirkland, Wash.—an event ertain to be analyzed at length in al. Since the meeting took place vo days after Netscape was qui- ganized by a group of engineers ntain View, Calif., Microsoft execs aim they had not even heard of npany at the time.

his point, Gates was only gradu- urming up to the potential of the t. Still, at the Shumway meeting onished his engineers to embrace ıania and look for ways to add ts such as Internet-based net- g, E-mail, Web access, and navi- to Windows. A few days after eting, one of his lieutenants, Sinofsky, circulated a technology nt containing specific plans for carrying out this strategy. In keeping with Gates's wishes, the systems group also included "integrate Net browsing" into Windows 95 as one of their key objectives in a three-year plan they circulated a few weeks afterwards.

It was a year later that a scouting party from Microsoft traveled to Netscape's Mountain View board room for a fateful meeting that ultimately launched the Justice Dept.'s investigation. On the Microsoft side were alliance specialist Dan Rosen, Allard, and a handful of others. Representing Netscape were Chief Executive James L. Barksdale, marketer Michael J. Homer, and chief technologist Marc L. Andreessen—who took notes on his portable computer.

The Justice Dept. says Microsoft had a proposition to make. It alleges that Microsoft wanted to illegally split the market with Netscape, and offered to forego creating browsers for operating systems other than its upcoming Windows 95 if Netscape opted out of the Windows 95 browser market. Sources close to Netscape add that Microsoft also wanted to make an equity investment in Netscape and take a board seat (a charge Microsoft doesn't deny).

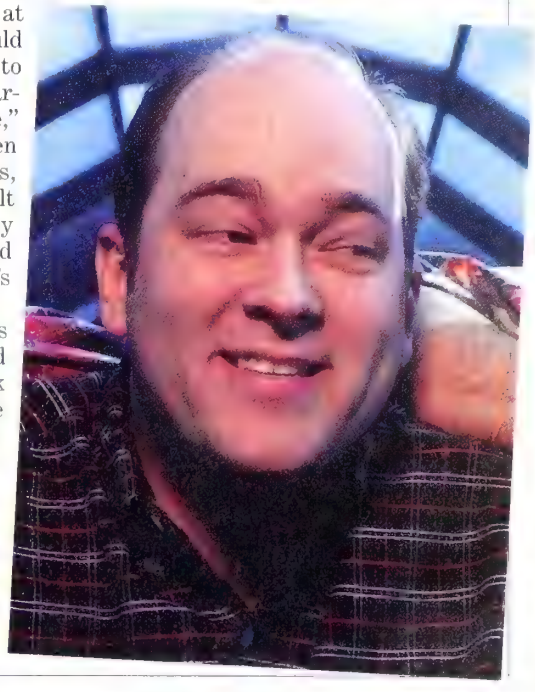
"BIG STICK." The unstated implication, according to Justice and sources at Netscape, was that Netscape would have a fight on its hands if it failed to cooperate. "There was a series of carrots, then a big stick hanging there," says one Netscape executive. When Netscape refused, Justice charges, Microsoft launched an all-out assault designed to put the young company out of business. Netscape complained to the Justice Dept. about Microsoft's tactics shortly after the meeting.

The meeting has since emerged as a key pillar of Justice's case—and one that Microsoft needs to knock down if it hopes to win in court. The plan, according to sources close to Microsoft, is to rely on depositions of Microsoft and Netscape participants to establish there was no offer of collusion and no threat of retribution.

Instead, Microsoft will argue that it was a perfectly normal meeting between an operating-system company and an independent software maker. Sources familiar with the company's defense strategy say that Microsoft showed off the Internet technology it was building into Windows 95 and invited Netscape to take advantage of those new features. And, as it often did when talking to software makers building products on Windows, Microsoft also tried to map out clearly what would be included in the operating system and what belonged in the other company's product—to avoid unnecessary conflicts. Microsoft adds it has an agenda printed on Netscape stationary and handwritten notes from one of its people that make it clear that they didn't try to carve up the browser market.

Will this be enough to persuade Judge Jackson? That's unclear. But, at the minimum, it will provide the public and opinion makers with a vastly different view of the company's behavior than the one they've been treated to so far.

By Steve Hamm in San Mateo, with Mike France in New York



> ntegration [of Internet technology] help us win mindshare of new Internet nts" — Networking engineer JAMES ALLARD, . 25, 1994, E-mail telling managers that Windows should include t messaging, file transfer, search, and browsing

DEALS

A SOUR NOTE FOR WASSERSTEIN

A foray into the music biz–part of the M&A whiz's bid to become a media mogul–has lost millions

The scene was right out of *The Great Gatsby*: a 14,000-square-foot home nestled on 25 acres in Long Island's East Hampton. On July 31, Wall Street investment banker Bruce Wasserstein and his wife, Claude, hosted a $25,000-a-head fundraiser for Bill and Hillary Clinton. After dinner, the 60 guests adjourned to Wasserstein's living room for a casual discussion with the president and his wife.

Overall, it has been a great year for the 50-year-old Wasserstein. He published a definitive book on mergers called *Big Deal*. The firm he co-founded, Wasserstein Perella & Co., just celebrated its 10th anniversary. And his beautiful new wife, a TV producer, is pregnant with their first child. One of the most prominent M&A bankers in the 1980s, he is still sought out for advice on mega-mergers.

LOTS OF GREEN: *Wasserstein and wife Claude at their East Hampton estate in 1996*

Although Wasserstein appears to have it all, there's still the embarrassing Red Ant matter. Red Ant Entertainment is a startup record label that over the past 18 months has cost Wasserstein some $32 million worth of grief and a hard lesson in the trendy and treacherous rock-music business.

Red Ant is part of Wasserstein's efforts to become a media mogul. In the past four years, his leveraged-buyout fund bought *The American Lawyer* from Time Warner Inc. and the *The National Law Journal* from Boston Ventures for about $90 million in equity. He is also developing plans for a new daily newspaper for Wall Street attorneys. He owns 35% of IMAX Corp., the Toronto-based 3-D large-screen movie-projection company, bought for $1.18 a share, which now trades at 20⅛.

But so far, the erudite Harvard University law and B-school grad has been far less successful in his ambitious foray into the glamorous music business. Most financial investors avoid the industry, but Wasserstein thought music had better returns than film or TV. Even some of Wasserstein's partners objected to the investment. Six weeks after starting Red Ant, he got in bed with Alliance Entertainment Corp., a troubled record

THE RED ANT TRAP

The startup record label has cost Wasserstein $32 million—so far

▶JULY, 19
Red Ant is
launched
$20 millio
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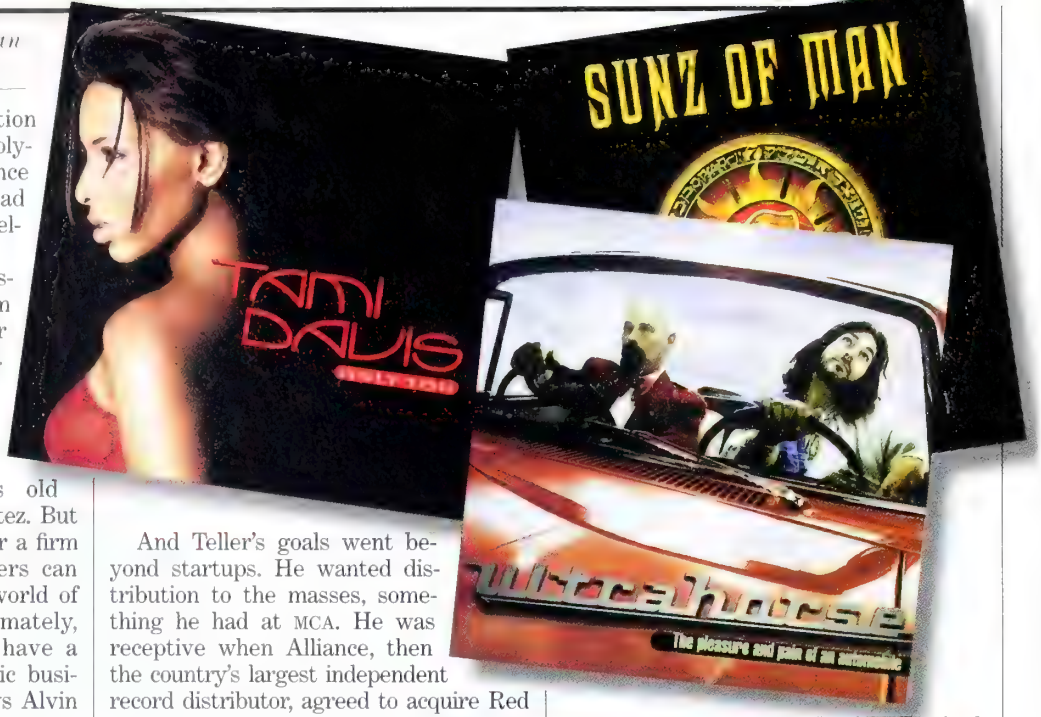
Perella

TMAKERS: *The Sunz of Man Tami Davis show promise*



outor, with the grand notion oming the next Sony or Poly- But within a year, Alliance ankrupt, and Red Ant had d through Wasserstein Perel- 20 million investment. willing to call it quits, Was- ein bought Red Ant from uptcy court last summer oured in $12 million more. the hope is that Red Ant old its own like another of erstein's music holdings, L. A., a fledgling Latin-mu- abel run by Madonna's old end, John "Jellybean" Benitez. But ry is still out as to whether a firm striped investment bankers can it rich in the hip, fickle world of ative urban music. "Ultimately, erstein Perella] did not have a understanding of the music busi- nd how it functioned," says Alvin ler, the music industry exec who ed Red Ant and ran it for Wasser- Wasserstein and his colleagues de- to comment on the record.

R BUDGET. Teller, former head of lusic Entertainment Group and ecords, seemed like just the man . A Harvard B-school grad, he nsidered one of the music-indus- eats, having turned MCA's music nto the most profitable part of ut Teller was also a man used to hundreds of millions of dollars at rtips, not to being a bootstrap- ntrepreneur.

decision to fund yet another music ıy was controversial among the stein partners. The firm had al- nvested $5 million to $10 million of ı money in 1995 in H. O. L. A., is focused on Latino crossover and $5 million more in JB Music ing, which owns copyrights to ngs as Will Smith's hit *Gettin' Vit It.* The firm then ponied up lion to back Teller and start Red ıe "ant" came from Teller's ini- Their analysis was very naive. It ar they didn't have a real under- g of the music business," says a ndustry exec who saw Wasser- rella's internal documents in eval- whether it should fund Red Ant.

And Teller's goals went beyond startups. He wanted distribution to the masses, something he had at MCA. He was receptive when Alliance, then the country's largest independent record distributor, agreed to acquire Red Ant in August, 1996, six weeks after Red Ant was formed. That left Wasserstein with only 15% of Alliance—and only two out of the nine board seats. But Teller became CEO of the combined company.

The deal quickly transformed Red Ant from a fledgling label to a division of a large company, Alliance. Red Ant's mission was to create an independent music label concentrating on rock, urban, and hip-hop music, with artists such as The Sunz of Man, Crumb, naked, and ultrahorse. Six months after its formation in July, 1996, it had amassed a small army of high-paid employees to find and promote new acts.

Extravagant spending was rampant, with fingers pointing all around. "I'm not sure who was responsible, but Red Ant was spending a hell of a lot of money. They certainly went first class," says former Alliance CEO Joseph Bianco. Adds Teller: "Red Ant's overhead got too big, too quickly." But he blamed others.

In hindsight, it's clear Red Ant would have been better off on its own. By 1996, the music industry was in a slump. Many independent record labels went bust, leaving Alliance holding the bag to refund record returns. "Wasserstein Perella's timing couldn't have been worse to get into the music-distribution business," says Michael Nathanson, an international media analyst at Sanford C. Bernstein & Co. in New York.

By June, 1997, *Variety* and *Billboard* were speculating about Alliance's possible demise. In late August, Alliance sank into Chapter 11. While Red Ant was left out of the bankruptcy proceedings, it was still owned by a bankrupt company. Red Ant, out of capital, shut down for three months.

"NIGHTMARE." Undaunted, Wasserstein bought the label back from bankruptcy court by agreeing to pump in $12 million more, which got Red Ant through part of '98. "The whole Alliance situation was such a nightmare," says Rick Ross, CEO of Delicious Vinyl Records, which was once 50% owned by Red Ant.

A year after the bankruptcy, the prospects for Red Ant, independent again, are still unclear. One record exec says the cloud of the Alliance bankruptcy still haunts Red Ant's acts. Many radio stations are gun-shy about giving them airtime, because they're not sure the promotional dollars will follow. Others in the music industry call the company Dead Ant. Says one music-industry exec: "It was a flea on a dying dog. When the dog died, the flea died, too."

Yet the flea isn't dead. On July 21, the label released a new rap album by The Sunz of Man, which landed on Billboard's top 200 best-selling album charts that week. Plus, Red Ant has three acts in the R&B chart's top 10, including Voices of Theory and Tami Davis. But even if these artists don't provide the major hits Wasserstein has paid so dearly for, expect more media purchases. He's just starting to "get jiggy wit it."

By Debra Sparks and Leah Nathans Spiro in New York

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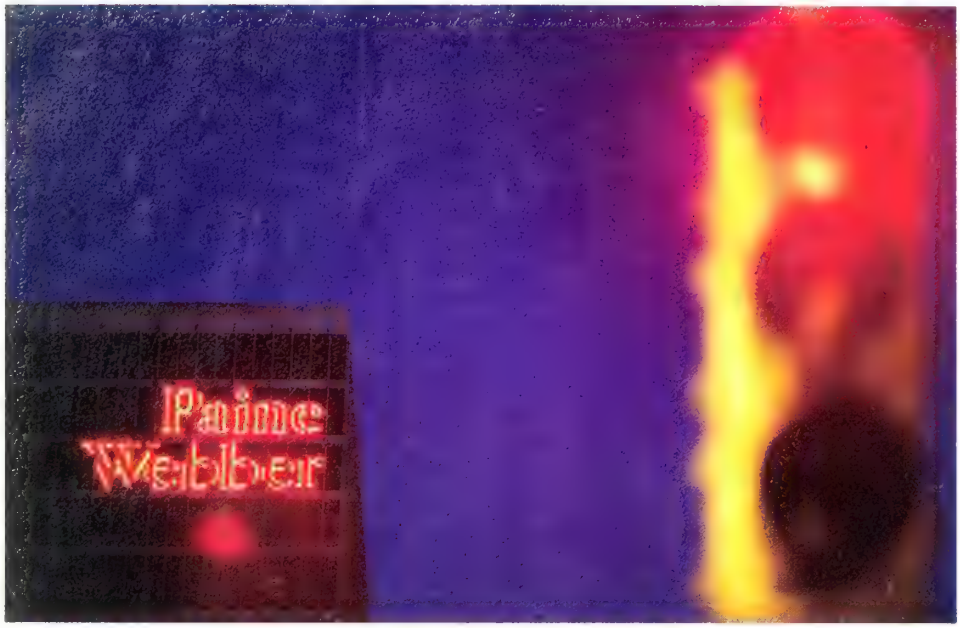
▶AUGUST, 1997
With the music industry in a bad slump, Alliance files for bankruptcy

▶AUGUST, 1997
Wasserstein buys Red Ant from bankruptcy court

DATA: BUSINESS WEEK

▶AUGUST, 1998
Red Ant gets three acts in the top 20 R&B charts, but the label awaits blockbusters



"It is only a matter of time before the IRS hears of this scheme...and goes after PaineWebber for conspiracy"

—From a CPA's letter to PaineWebber

SECURITIES FIRMS

OFFSHORE SQUALL AT PAINEWEBBER

The firm fires a broker who promoted a tax scheme

It was just another sultry day at the Atlantis Resort & Casino on Paradise Island, Nassau, the Bahamas. On July 25, a local company, International Trade & Investments Ltd., was holding a seminar on a topic that, after tourism, is the lifeblood of this tidy island nation: how to invest offshore. In addition to Bahamian government officials, one of the speakers was Terry Cross, a veteran broker with PaineWebber Inc.'s San Francisco office.

Cross pitched the audience of largely U.S. investors on an enticing arrangement, according to a letter obtained by BUSINESS WEEK and written by Daniel C. Ertel, a CPA who attended the seminar. Ertel's letter described the pitch: set up a corporation in the Bahamas that is not subject to income tax. The individual then can invest the corporation's funds with PaineWebber, direct how the money should be invested, and even gain access to the money with a credit card at automated teller machines in the U.S.

There's only one problem: PaineWebber's Cross was essentially promoting an illegal tax-evasion scheme, said Ertel. Cross failed to mention that U.S. citizens are required to declare all income, including income earned by offshore corporations owned by the taxpayer.

Ertel, a CPA for 30 years and a former Internal Revenue Service agent, said in his letter that Cross's speech left him "dumbfounded." He sent the letter on July 27 to PaineWebber's general counsel, Theodore A. Levine. Wrote the CPA, "It seems to me that PaineWebber's failure to mention possible U.S. income tax consequences, as well as suggesting ways of repatriating the earnings from the foreign investments (without payment of income taxes thereon) could well constitute conspiracy under 18 USC Section 371.... It is only a matter of time before the IRS hears of this scheme (if they haven't already) and goes after PaineWebber for conspiracy, plus the individuals who, failing to do diligence on their own, participated in this tax evasion scheme."

The blunt letter got quick results: PaineWebber fired Cross at once and froze his customers' accounts. The fir now transferring Cross's accounts ou PaineWebber, sources say. "Terry C was terminated promptly for failin follow firm policy," says PaineWeb Levine. The grounds: speaking at s nars unbeknownst to PaineWebber, several sources with knowledge of matter. When asked if Cross was moting a tax evasion scheme, Le says: "Our firm policy is to have clients consult their tax advisers fo advice and that all our employees a compliance with U.S. tax law."

HIRE ME. Cross's attorney, Robert G denies his client was advocating tax sion. "At no time did Cross counsel one to participate in unethical or il activities," he says, adding that an counts Cross opened were approve PaineWebber's operations departm "PaineWebber knew exactly what accounts were," says Gonser.

Yet Ertel isn't the only tax e who believes that this type of ac has serious tax consequences for citizens. The bottom line: A U.S. c is obliged to pay income taxes regar of where he or she earns it. "I 100% [with Ertel]," says Howa Rosen, a Coral Gables (Fla.) tax att and CPA. "It sounds like tax fraud. Felony. Jail time."

Why did Ertel stick his neck out letter said that he thought PaineWebber management would n erate the practices Cross outline also wrote that PaineWebber migh sider hiring him as a consultant. who was unhappy that his letter BUSINESS WEEK, says: "I felt the a priate course was to bring it to t

n of the company in a confidential
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HEODORE A. LEVINE,
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COMMENTARY

By Gary Silverman

UNCLE SAM IS GIVING BANKS A FREE RIDE

Here's a quiz: Name a lender with more assets than Citicorp and a loan book growing 25% a year. A whirling dervish in the capital markets, this outfit can sell scores of bond issues in a day, and it deals in so much overnight paper that its debt issuance has exceeded the U.S. Treasury's. Any idea? It's the Federal Home Loan Bank System.

And what is the Federal Home Loan Bank System? In essence, it's a government-sponsored mechanism to help finance homebuying. At its birth during the Depression, it brought liquidity to a parched mortgage market. Today, it's less needed but keeps growing, with little social purpose or even accountability. Indeed, the now-$379 billion financial institution waited until July to publish its 1997 annual report.

The system, established by the Hoover Administration, consists of 12 regional Home Loan Banks. Its role is to raise money in the capital markets, then lend to thrifts and banks, which earn the right to borrow by buying stock in their local Home Loan Bank. The system's advantage is its government link: Borrowing costs are held down by the implicit federal backing and the paper's exemption from state income tax.

NO MONEY TRAIL. The crisis to which the system responded, of course, is long over. Financial markets are awash with liquidity. Banks can get funds by selling mortgages in a huge secondary market. But the Home Loan Banks keep raising money. Much of it—$143 billion at midyear—they keep for themselves, parking it in higher-yielding investments. But their loans, too, have soared—to $228 billion, double 1993's level. As of Dec. 31, the system was the third-biggest U.S. financial institution, behind Fannie Mae and Chase Manhattan Corp.

BIG PLAYER

Largest U.S. financial institutions, ranked by assets as of 12/31/97

RANK	INSTITUTION	ASSETS (BILLIONS)
1	FANNIE MAE	$392
2	CHASE MANHATTAN CORP.	366
3	FEDERAL HOME LOAN BANKS	358
4	CITICORP	311
5	NATIONSBANK CORP.	265

DATA: FEDERAL HOME LOAN BANK OF CHICAGO

How do banks use the loans? The answer is elusive. "Because money is fungible, there is currently no assurance that money lent by the System will actually be used to finance housing," Treasury Secretary Robert E. Rubin wrote in a July 27 letter to Senate Banking Committee Chairman Alfonse M. D'Amato (R-N.Y.). Instead, he said, the system's loans have "become a government-subsidized source of funds for practically any depository institution."

For banks, it's a good deal. They can raise funds without lifting deposit rates, running ads, or even maintaining branches. System loans also can be cheaper than other wholesale funds because borrowers earn dividends on the stock they buy to join a Home Loan Bank.

To be sure, there's talk of improving the system. In a pilot program, Chicago's Home Loan Bank is directly funding mortgages. Congress is thinking of opening the system to all banks with less than $500 million in assets to give them more access to capital markets. "There is reform in the air—real reform," says Bruce A. Morrison, chairman of the Federal Housing Finance Board, the system's regulator.

But the discussions about new missions overlook the key issue. Banks are making record profits. Do they really need such subsidies?

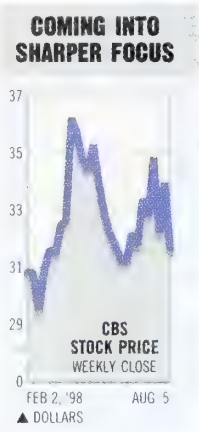
That's a particularly troubling question now that federal regulators are expressing doubts about bank credit standards. Regulators fear too much money in the banking system is chasing too few good deals. If so, the Home Loan Banks, for all their capacity to do good, are part of the problem. It's time to consider whether this Depression-era institution still makes sense.

Silverman covers banking.

BY GENE G. MARCIAL

CBS: ARE BUYERS TUNING IN?

What's hot at CBS (CBS)? Despite lukewarm ratings for its network TV shows, the stock could sizzle. According to Street pros, moguls such as Barry Diller and Sumner Redstone are interested in acquiring the CBS TV network and its 18 TV stations—if not the whole company.



The stock, now at 31, has gained only 16% this year. But it has more than doubled since 1996, when it was still called Westinghouse Electric. If buyout speculation spreads, the stock could soar.

The likely outcome, says Mark Boyar, who heads the New York investment firm that bears his name, may be CBS selling or spinning off its TV network and its 18 owned stations, and retaining the radio operations—Infinity Broadcasting, CBS Radio Network, and more than 70 stations. CBS has also bought American Radio Systems, which owns and provides programs for 100 stations. In addition, CBS owns two cable-TV networks: The Nashville Network and Country Music Television.

Mel Karmazin, the new COO at CBS, "is a dynamic executive and a winner: He gets upset when the stock is down," says Boyar. "So he won't stand in the way of enhancing CBS's value—including the sale or spin-off of assets." And Diller, he notes, has always wanted CBS. Six months ago, rumors also swirled about Diller's attraction to CBS.

Tom Graves of Standard & Poor's isn't sure a deal is imminent, but notes that CBS is a "logical" candidate for either USA Networks, which Diller heads, or Viacom, which Redstone runs. A CBS merger with either company "could make sense—but more so with Diller's company," says Graves. USA Networks operates TV stations devoted mostly to local programming. If Diller owned the CBS network and TV stations, says Graves, Diller would have extensive outlets for his TV shows.

Analyst Edward Hatch of Warburg Dillon Read figures that its TV stations alone are worth $8.4 billion, or 14 a share, and its TV network $3 billion, or 5 a share. The radio assets, he adds, are worth much more—$25 billion, or 25 a share. The cable network is worth another $2.5 billion, or 4 a share.

A CBS spokesman says it's not company policy to comment on rumors. Ditto, says Viacom's Carl Folta and USA Networks' Jennifer Goebel.

TOP TIPS IN SMALL-CAPS

Worried about small-cap stocks in this market? Not Susan French of Northern Trust Global Investments: She wouldn't have any other kind. French has outscored the small-stock indexes with her Small-Cap Fund, invested in 1,000 companies with average caps of $900 million. Last year, her fund gained 29.7%, beating the Russell 2000 index' gain of 22%. And this year through July 31, the fund lost 1.71%, vs. Russell's wider loss of 3.4%.

Topping her favorites in the portfolio: Charming Shoppes (CHRS), Integrated Device Technology (IDTI), and Glenayre Technologies (GEMS). French notes that they all have similar attributes: They're out-of-favor stocks, selling well below their intrinsic worth. Also they're cheap, compared with peers.

Charming Shoppes has 1,135 stores in 43 states specializing in moderately priced women's apparel. The stock is at 4⅜, down from 7⅞ last September. Sales for the year ended Jan. 31, 1998, of $1.01 billion matched those of a year ago. Earnings of 15¢ a share are expected for fiscal 1999, and 25¢ for 2000.

FRENCH: *Her fund outdid the indexes*

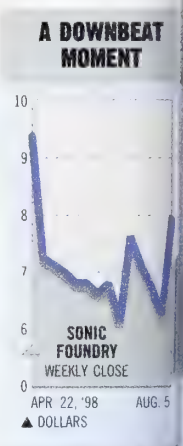
Integrated Device, a maker of high-performance circuits, is trading at 5⅝—close to its 52-week low of 5. It hit 16½ in mid-February. Some analysts see a big turnaround next year, estimating earnings of 53¢ a share, vs. a projected loss of 64¢ this year.

Glenayre, a worldwide provider of telecom gear and related software, now at 7⅝ a share, is also trading close to it 52-week low. But it's expected to sho earnings of 50¢ a share this year, v last year's loss of $1.28.

ACID MAY LIVEN UP SONIC FOUNDRY

Music on the Internet is vigorous b volatile. Stocks of companies pr viding online music have been on roller coaster. Enter Sonic Foundr (SFO), which produces PC-based softwa products—designed to run on Windov and Windows NT operating systems. I chief product, called ACID, gives a co puter the capability of a sound stag producing sound that will help t users—both amateurs and professio als—to "create music," that could downloaded on a CD.

"That's the fascination of this co pany," says Will Hickey of Anchor Ca ital Advisers, which snapped up so 200,000 shares when the company we public on Apr. 22 at 15 a share. The stock has since slumped to just above 7, despite higher-than-expected third-quarter earnings of 3¢ a share, vs. a loss of $1.73 a year earlier. No matter, says Hickey, who believes Sonic Foundry is a play for the long haul in the business of creating multimedia audio formats on the Internet.



Sonic Foundry's ACID software tra mits sound to the PC, where users assemble their own music, expla Hickey. Sound engineers can use it record music and put it on a CD.

Hickey says Sonic Foundry's r enues could hit $20 million in 199 from sales of ACID and Sonic's prod for professionals called Sound Forg described as a "word processor" for dio. It allows users to store, mani late, and transfer audio in digital for Security Capital Trading expects 1 earnings of 30¢ a share.

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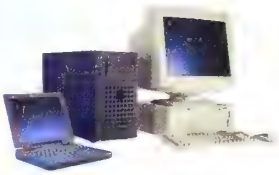

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A TRIPLE WHAMMY TO THE BOTTOM LINE

The GM strike, rising wages, and Asia's crisis knock net income back by 2%

For more than a few quarters, falling profits have seemed a distant concern for Corporate America and U.S. stock investors. No longer. In 1998's second quarter, the 900 companies on BUSINESS WEEK's Corporate Scoreboard earned less than they did in the same period a year earlier—the first time that's happened since late 1995. Net income fell 2% for the quarter, on a 7% rise in sales. Even absent one-time charges and special gains, things didn't look much better: On an operating basis, profits rose only 2%. "It was a rotten quarter," says David Wyss, chief economist of Standard & Poor's DRI.

For culprits, look to a costly ... strike, rising labor costs across the e... omy, and an increasingly worrisome slowdown overseas. General Mo... Corp.'s earnings crashed 81% bec... of the United Auto Workers strike. ... move the country's largest manufac... er from the Scoreboard, and the ...

Winners and Losers in Quarterly Profits

INDUSTRIES

LEADERS	PERCENTAGE CHANGE FROM 1997's SECOND QUARTER
DRUG DISTRIBUTION	258
PAPER	126
TELEPHONE COMPANIES	117
DRUGS & RESEARCH	112
MACHINE & HAND TOOLS	98
PAPER CONTAINERS	73
PRINTING & ADVERTISING	63
TRANSPORTATION SERVICES	51
RETAILING	42
SAVINGS & LOAN	36
BANKS-MIDWEST	31
HOTEL & MOTEL	30
TRUCKING & SHIPPING	30
SPECIAL MACHINERY	22
MISCELLANEOUS LEISURE	21

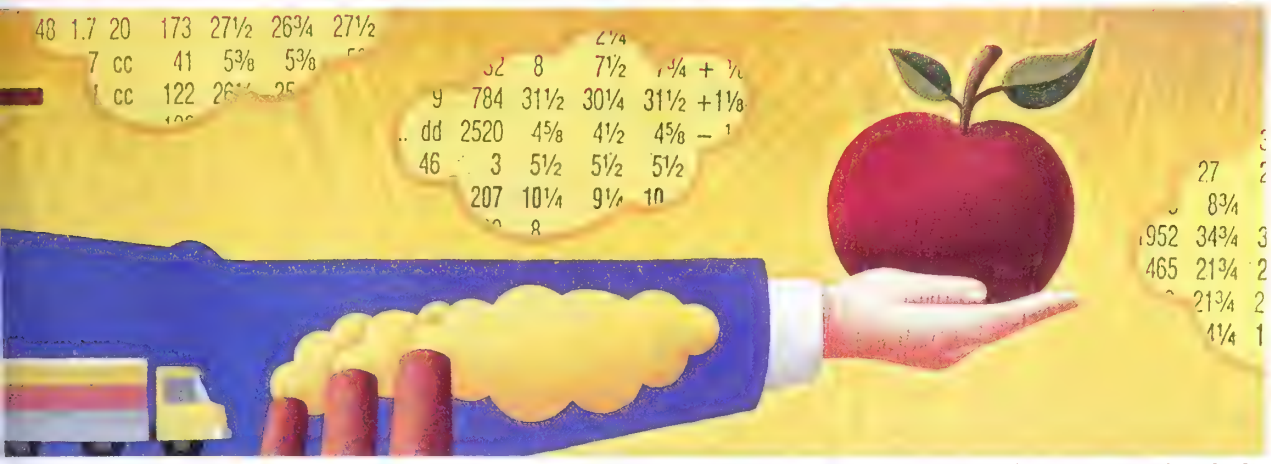
LAGGARDS	PERCENTAGE CHANGE FROM 1997's SECOND QUARTER
COMPUTERS & PERIPHERALS	LOSS
ELECTRONICS	LOSS
TELECOMMUNICATIONS	LOSS
GAS UTILITIES	LOSS
ELECTRICAL PRODUCTS	LOSS
ALUMINUM	–66
ENTERTAINMENT	–55
SEMICONDUCTORS	–54
APPAREL	–47
TEXTILES	–44
RAILROADS	–42
NONFERROUS METALS	–41
COAL, OIL & GAS	–31
CARS & TRUCKS	–24
STEEL	–20

COMPANIES

WHO MADE THE MOST	MILLIONS OF DOLLARS
GENERAL ELECTRIC	$2450
FORD MOTOR	2381
MEDIAONE GROUP	2174
PHILIP MORRIS	1799
AMERITECH	1707
EXXON	1620
IBM	1452
NATIONSBANK	1408
MICROSOFT	1357
MERCK	1316
COCA-COLA	1191
INTEL	1172
TRAVELERS GROUP	1141
CITICORP	1097
CHASE MANHATTAN	1074

WHO LOST THE MOST	MILLIONS OF DOLLARS
COMPAQ COMPUTER	–$3632
MOTOROLA	–1328
QWEST COMMUNICATIONS	–876
XEROX	–712
HOUSEHOLD INTL.	–502
COMPUTER ASSOCIATES	–481
ROCKWELL INTL.	–420
NEXTEL COMMUNICATIONS	–359
VIACOM	–281
CONSECO	–268
SONAT	–258
LUCENT TECHNOLOGIES	–233
SILICON GRAPHICS	–220
NATIONAL SEMICONDUCTOR	–21...
MCN ENERGY GROUP	–210

DATA: STANDARD & POOR'S COMPUSTAT, A DIVISION OF THE McGRAW-HILL COMPANIES



field broke even. U.S. wages and es, meanwhile, have surged 4% ear. Up until now, productivity have partially offset those higher But the far bigger problem for nies this quarter was the Asia which has slashed prices and p demand for U.S. products from es and cellular phones to cola. lappable U.S. consumers helped hings from getting really dismal. mer spending rose 5.8% and busi- pending was up a respectable though down from 17.8% growth previous quarter, according to mmerce Dept. Still, gross domes- duct gained only 1.4% last quar- some extent, payback for a start to the year. Much of the uarter's staggering 5.4% GDP came from a record $95.5 bil- uildup in inventories. Now that l from Asia is falling off a cliff, usinesses are adding to invento- half that rate. With industrial tion down 0.6% in June, econo- re scrambling to lower their es- for third-quarter growth.

CH TRIALS. Some of the biggest ointments are being posted by ies with a lot of business in Asia. la Inc., which took a $2 billion to restructure its wireless and iductor operations, blamed Asia barely breaking even on an op- basis. Coca-Cola Co.'s profits by 9%, to $1.2 billion. ging Asian currencies and the g cheaper imports are also ham- U.S. profit margins, which fell to sales last quarter. That com- ith 6.4% a year earlier, making r's second-quarter showing the since 1994. No sector suffered an high technology. U.S. manu- s faced cheap PCs and semicon- flooding the market from Japan, and Taiwan, which exacerbated price declines. By including a $3.2 billion write-off related to its purchase of Digital Equipment Corp., PC maker Compaq Computer Corp. recorded the biggest net loss, $3.6 billion.

Commodity prices have plummeted, pounding a broad range of industries. Industrial metals are down. Oil is getting killed. That's good news for airlines and trucking firms, whose profits grew 15% and 30%, respectively. Among the biggest beneficiaries: AMR Corp., whose earnings soared 35%, to $409 million. But with crude prices off more than 40% from a year ago, earnings for the oil sector have dropped $2.1 billion.

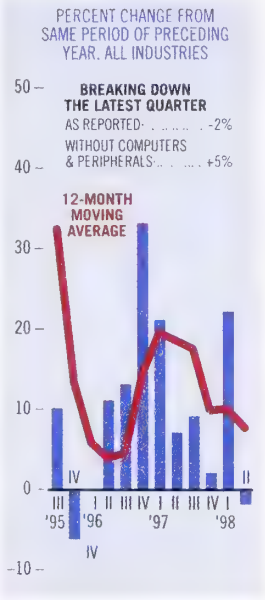
Even companies selling gasoline and other refined products, which have maintained better margins, suffered. At Exxon Corp., for example, profits were down 18%, to $1.6 billion. That looks bad until you compare it with Texaco Inc., down 40%, and Amoco Corp., down 54%. Don't expect a quick turnaround, either. "The second half of this year will be exceptionally challenging," says Jack E. Little, CEO of Shell Oil Co., the U.S. subsidiary of Royal Dutch/Shell Group.

Still, some companies and industries are bucking the trend. General Electric Co. was again a top performer, generating a Scoreboard-best $2.5 billion of profits, up 13% from last year. And despite the carnage in computer hardware, Microsoft Corp. parlayed its fat 34% profit margins into a 28% income gain.

Most local phone companies also did well. Carriers SBC Communications Inc. and Ameritech Corp., which intend to

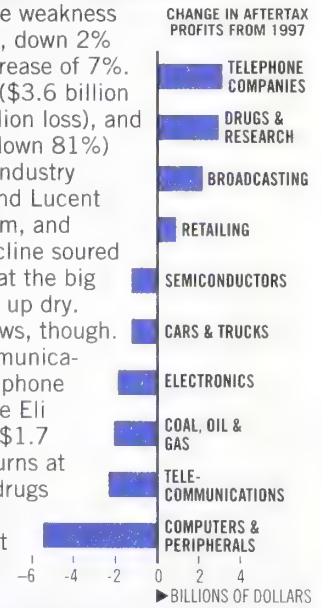
A Spotlight on Second-Quarter Profits

AFTERTAX PROFITS QUARTER BY QUARTER



INDUSTRIES WITH THE BIGGEST DOLLAR CHANGE IN THE QUARTER

There is no disguising the weakness of second-quarter profits, down 2% on a modest revenue increase of 7%. Bad news from Compaq ($3.6 billion loss), Motorola ($1.3 billion loss), and General Motors (profits down 81%) chopped 8% off the all-industry results. Losses at AT&T and Lucent Technologies hurt telecom, and Intel's 29% earnings decline soured semiconductors. Profits at the big oil companies also came up dry. There was some good news, though. Ameritech and SBC Communications combined to make phone companies winners, while Eli Lilly's comeback from a $1.7 billion loss and solid returns at Merck and Pfizer made drugs pay off. Is this the worst we'll see, or just the start of an earnings slide?

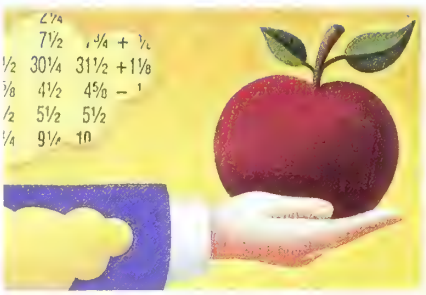


DATA: STANDARD & POOR'S COMPUSTAT, A DIVISION OF THE McGRAW-HILL COMPANIES

Strong consumer spending cushioned the drop in earnings–and offers a way out of the profit squeeze

merge, saw year-over-year profit comparisons boosted by last year's huge restructuring charges. SBC went from a loss of $787 million to a gain of $966 million. Ameritech's profits more than tripled, to $1.7 billion. Competition was much more intense in long-distance, where the major carriers all got hurt. AT&T's sales growth was just 1%, for example, and its $1.7 billion after-tax restructuring charge left the company with a $143 million loss.

The needs of an aging population boosted drugmakers. Profits at Pfizer Inc., maker of the drug Viagra, swelled by 37%, to $628 million. As a group, the industry saw profits double, and all the big drug firms, except Pharmacia & Upjohn Inc., posted double-digit



growth. With HMOs favoring drug therapy over costlier options like surgery, pharmaceutical companies are among the few industries able to raise prices.

That wasn't the case in autos. Even so, Chrysler managed to more than double profits, to $1 billion, thanks largely to deep cost cutting and the continuing popularity of sport-utility vehicles. F Motor Co., operating without the sociates First Capital Corp. unit t was spun off in the first quarter, po 7% lower sales and 6% less profit.

Some analysts worry that to m their numbers, the Big Three auto n ers likely stole sales from the t quarter by giving customers sweet d on trade-ins. But keeping consum happy and spending, in any way p ble, may be the only way out of profit squeeze for U.S. corporati Otherwise, with labor costs rising prices stagnant, executives will be h pressed to improve profit margins return to positive earnings growth.

By Andrew Osterland in Chic with bureau reports

THE ASIAN FLU NOW, PNEUMONIA LATER?

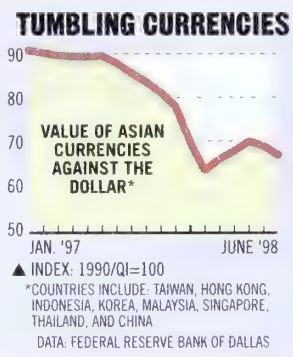
Think the Asian flu has already hit the U.S. economy? This quarter's profit report is a mild case of the sniffles compared with what's to come. In second-quarter reports, "company after company mentioned weakness in Asia as an uncertainty for future earnings," says Benjamin Zacks, executive vice-president of Zacks Investment Research in Chicago. "Not one gave any inkling that they expected an upturn."

Hopes for the summer's profits are already falling. Analysts who started 1998 predicting a 15% average gain in third-quarter earnings for the Standard & Poor's 500 companies slashed their forecast to 7.2% by Aug. 1, according to surveys by First Call Corp. For all of 1998, First Call expects profits to rise 7.1%, down from 11% in 1997.

SOBERING SCENARIO. The Asian crisis has been moving through the U.S. economy since last summer. The first casualties were companies whose overseas operations earned local-currency profits that suddenly were worth far fewer dollars. That effect will last into the fourth quarter for companies operating in Thailand and Malaysia, and well into 1999 for those with Indonesian outlets.

Next to suffer were producers of commodities—from oil to food to semiconductors—whose prices react instantly to drops in global demand. At Intel Corp.—where profits fell 29% last quarter as Asian sales remained flat—a spokesman sighed: "A return of growth in Asia isn't something we expect soon."

Indeed, economists predict that Asia's economies won't hit bottom until mid-1999, and demand won't pick up much until some time in 2000 (page 46). The worst-case scenario? Economists from Standard & Poor's DRI recently assigned a 20% to 25% chance to a Japan-led depression in Asia.



Now, the third stage—slowing demand for U.S. goods sold in Asia—is hitting home. Governments and corporations in Asia, excluding Japan, will cut their spending on structures and equipment by 20% to 30% this year, says Timothy Condon, an economist at Morgan Stanley Dean Witter in Hong Kong. Among those in danger is Boeing Co., which has 40% of its backlog earmarked for Asian customers and is sitting on some 20 airliners while their Asian purchasers renegotiate financing. The biggest threat to future earnings: O ders are dropping for 747s, Boeing's most profitable jet.

As the pain continues, U.S. manu facturers who compete with ever-cheaper Asian imports could feel flu symptoms. "Textile TVs, and toys—tha the next battleground," says Mar M. Zandi, chief ec omist at Regional Financial Associat Inc. in West Chester, Pa.

Some U.S. com panies, of course, will continue to be efit from Asia's woes. Lower prices on Asian goods are holding down costs at retailers such as Wal-Mart Stores Inc. Capi fleeing Asia's woes has helped buo the financial-services industry. But with profits growing well below th optimistic forecasts of early 1998, that could be changing. Wall Stree itself could prove the next victim that nasty bug from the Orient.

By Mike McNamee in Washingt with Mark L. Clifford in Hong Ko and Seanna Browder in Seattle

CORPORATE SCOREBOARD

sary

: Includes all sales and operating revenues. For includes all operating es.

TS: Net income before dinary items. For banks, profits are net income after security gains or losses.

MARGINS: Net income from continuing operations before extraordinary items as percent of sales.

RETURN ON COMMON EQUITY: Ratio of net income available for common stockholders (most recent 12 months) to latest available common equity, which includes common stock, capital surplus, and retained earnings.

PRICE-EARNINGS RATIO: Based on July 24, 1998, common-stock price and corporate earnings from continuing operations before extraordinary items for most recent 12-month period.

EARNINGS PER SHARE: For most recent 12-month period. For most companies, this is diluted earnings per share.

PANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY	PRICE-EARNINGS RATIO	12 MONTHS' EARNINGS PER SHARE
	2ND QUARTER 1998 $ MIL.	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6-30	7-24	
NDUSTRY COMPOSITE	**1492596.1**	**7**	**2952147.2**	**7**	**87265.5**	**–2**	**195232.4**	**10**	**5.8**	**6.4**	**16.1**	**27**	**1.97**
EROSPACE & DEFENSE													
STRY COMPOSITE	**32784.0**	**4**	**63899.3**	**7**	**1300.9**	**–11**	**2135.9**	**–24**	**4.0**	**4.6**	**3.1**	**NM**	**0.47**
	13389.0	8	26330.0	16	258.0	–46	308.0	–70	1.9	3.9	–6.8	NM	–0.92
AL DYNAMICS	1178.0	14	2332.0	18	92.0	15	174.0	15	7.8	7.8	17.1	17	2.68
ICH (B. F.)	1011.0	19	1948.7	21	55.9	–13	110.1	17	5.5	7.6	9.7	24	1.79
REAM AEROSPACE	557.0	7	1060.4	18	55.6	41	96.1	21	10.0	7.6	236.4	14	3.39
EED MARTIN	6520.0	–5	12737.0	–6	289.0	–6	558.0	–7	4.4	4.5	–10.8	NM	–2.95
IRT NEWS SHIPBUILDING	465.0	3	862.0	1	16.0	14	32.0	19	3.4	3.1	–21.6	NM	–1.23
ROP GRUMMAN	2139.0	–4	4153.0	4	93.0	–14	81.0	–58	4.3	4.8	10.7	21	4.13
ION CASTPARTS (9)	370.0	17	725.2	20	24.4	25	48.7	35	6.6	6.2	15.3	14	3.73
TRAND	490.0	11	975.0	18	57.0	33	108.0	38	11.6	9.8	40.1	15	3.72
TECHNOLOGIES	6665.0**	3	12776.0	3	360.0	18	620.0	17	5.4	4.7	26.4	21	4.61
ITOMOTIVE													
TRY COMPOSITE	**111580.5**	**–4**	**223492.5**	**–1**	**4620.9**	**–21**	**25636.2**	**141**	**4.1**	**5.1**	**49.8**	**6**	**9.32**
RS & TRUCKS													
' COMPOSITE	**96919.8**	**–6**	**195181.1**	**–3**	**3949.9**	**–24**	**24394.4**	**155**	**4.1**	**5.1**	**57.1**	**5**	**11.31**
LER	16488.0	20	32840.0	12	1003.0	108	2055.0	36	6.1	3.5	26.2	12	5.04
OTOR	37289.0	–7	73873.0	–5	2381.0	–6	20027.0	401	6.4	6.3	98.9	3	18.49
L MOTORS	38901.0**	14	80472.0	–8	389.0	–81	1993.0	–49	1.0	4.6	28.0	11	6.46
AR INTERNATIONAL (2)	2028.0	32	3745.0	33	67.0	123	105.0	133	3.3	2.0	23.4	12	2.54
H TRUCK (3)	290.1	64	507.9	46	5.0	79	9.1	72	1.7	1.6	12.1	15	1.82
	1923.7	16	3743.2	18	104.9	47	205.3	59	5.5	4.3	26.5	9	5.36
RTS & EQUIPMENT													
' COMPOSITE	**11061.5**	**19**	**21180.5**	**17**	**439.6**	**0**	**772.5**	**18**	**4.0**	**4.7**	**16.2**	**16**	**2.19**
NDUSTRIES	643.3	2	1236.7	3	27.7	31	41.2	21	4.3	3.3	13.9	13	3.01
'ARNER AUTOMOTIVE	451.3	0	916.0	3	19.6	–34	45.6	–16	4.3	6.6	13.2	12	3.96
	2340.3**	9	4754.7	12	116.0	24	223.6	20	5.0	4.4	22.9	14	3.79
' DIESEL	556.3	0	1145.1	6	10.4	41	20.1	46	1.9	1.3	10.0	14	1.46
(4)	927.0	0	1762.7	–1	41.6	24	68.6	20	4.5	3.6	–4.3	NM	–0.68
-MOGUL	1214.0	152	1872.0	94	28.4	0	21.2	–50	2.3	5.9	14.3	58	1.10
P (1)	431.9	7	797.4	9	21.4	–75	34.2	–64	5.0	20.8	24.9	13	1.82
EMMERZ INTERNATIONAL (11)	413.9	65	785.8	66	14.7	287	26.7	NM	3.6	1.5	25.0	26	1.40
	2175.0	18	4207.1	18	65.7	8	113.0	10	3.0	3.3	16.6	16	3.19
R AUTOMOTIVE (3)	1003.0	13	1971.0	15	47.0	24	92.0	28	4.7	4.3	71.9	11	2.03
MFG. (9)	273.1	6	528.1	6	20.1	10	38.3	11	7.4	7.1	17.1	14	2.46
RD PRODUCTS (6)	294.6	0	572.6	–1	18.3	–5	31.9	61	6.2	6.6	15.3	11	2.56
I NATIONAL	337.7	72	631.3	90	8.7	207	16.2	335	2.6	1.4	11.4	16	1.30
E & RUBBER													
COMPOSITE	**3599.2**	**–4**	**7130.8**	**–3**	**231.3**	**9**	**469.4**	**18**	**6.4**	**5.7**	**16.4**	**15**	**3.07**
TIRE & RUBBER	461.7	0	899.3	7	32.3	3	58.9	4	7.0	6.8	14.2	12	1.59
AR TIRE & RUBBER	3137.5	–5	6231.5	–4	199.0	10	410.5	20	6.3	5.5	17.0	16	3.81

d quarter ended May 31. (2) Second quarter ended Apr. 30. (3) Third quarter and most recent six months ended June 30. (4) Third quarter and most recent six months ended May ird quarter and most recent six months ended Apr. 30. (6) Fourth quarter and most recent six months ended June 30. (7) Fourth quarter and most recent six months ended May 31. quarter and most recent six months ended Apr. 30 (9) First quarter and most recent six months ended June 30. (10) First quarter and most recent six months ended May 31. (11) ter and most recent six months ended Apr. 30. *Sales include excise taxes. **Sales include other income. ***Sales include excise taxes and other income. †Revenues from major sub- ot included in consolidated sales. Earnings per share are for latest 12 months, not necessarily for end of most recent fiscal year; they include all common-stock equivalents but exclude ary items. NA = not available. NM = not meaningful

DATA: STANDARD & POOR'S COMPUSTAT SERVICES, A DIVISION OF THE McGRAW-HILL COMPANIES.

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY	PRICE-EARNINGS	M EA
	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL.	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6-30	RATIO 7-24	
3 BANKS													
INDUSTRY COMPOSITE	90348.6	12	177414.4	12	11872.8	15	22463.5	7	13.1	12.8	15.6	21	3
(A) BANKS - EAST													
GROUP COMPOSITE	40595.5	14	79501.7	13	4899.0	12	9095.6	5	12.1	12.2	17.3	20	3
ASSOCIATED BANC-CORP	241.4	7	481.6	8	41.0	16	80.9	17	17.0	15.7	11.9	40	
BANK OF NEW YORK	1431.0	2	2817.0	3	295.0	10	578.0	8	20.6	19.2	23.1	22	2
BANKBOSTON	1847.6**	11	3774.0	16	241.9	14	480.1	15	13.1	12.8	19.6	16	3
BANKERS TRUST	3547.0**	21	6827.0	20	164.0	–23	386.0	–7	4.6	7.3	15.4	16	7
CHASE MANHATTAN	8352.0**	11	16616.0	13	1074.0	16	1799.0	–3	12.9	12.3	17.0	18	4
CITICORP	9865.0	15	18934.0	12	1097.0	7	2162.0	7	11.1	11.9	17.6	21	7
FIRST MARYLAND BANCORP	359.6	46	809.3	64	47.5	32	143.2	105	13.2	14.6	11.0	NA	
FLEET FINANCIAL GROUP	2525.0**	11	4814.0	10	393.0	13	716.0	5	15.6	15.2	16.7	18	4
MBNA	1233.5**	9	2388.7	10	172.0	24	321.4	22	13.9	12.3	33.4	27	1
MELLON BANK	1436.0**	17	2828.0	17	215.0	16	421.0	14	15.0	15.2	19.7	22	3
MORGAN (J. P.)	4969.0**	15	9892.0	15	481.0	29	718.0	–10	9.7	8.6	12.2	19	6
NORTH FORK BANCORPORATION	197.2	–2	399.0	6	50.9	17	58.3	–27	25.8	21.7	15.2	24	1
PNC BANK	1924.2**	13	3754.6	11	280.4	8	549.7	5	14.6	15.2	19.4	16	3
REPUBLIC NEW YORK	995.5	8	1926.1	7	118.8	8	236.3	7	11.9	11.9	14.3	16	4
STATE STREET	1043.0**	26	2003.0	25	109.0	18	215.0	21	10.5	11.1	20.1	28	2
SUMMIT BANCORP.	628.5**	7	1237.4	7	118.5	13	230.9	23	18.9	17.9	16.0	20	2
(B) BANKS - MIDWEST													
GROUP COMPOSITE	20275.1	12	39654.6	11	2952.2	31	5753.9	19	14.6	12.4	16.8	22	2
BANC ONE	3767.0**	10	7428.7	10	487.3	901	1035.7	125	12.9	1.4	18.4	19	2
COMERICA	800.0	2	1608.7	4	150.4	16	294.8	16	18.8	16.5	21.5	28	2
COMMERCE BANCSHARES	235.9	12	463.4	12	37.5	16	72.0	17	15.9	15.3	14.0	20	1
FIFTH THIRD BANCORP	661.6	11	1308.5	11	57.8	–48	182.0	–18	8.7	18.7	12.3	39	
FIRST CHICAGO NBD	2753.0**	10	5356.0	9	408.0	8	791.0	4	14.8	15.1	19.0	17	1
FIRSTAR	485.5**	5	963.7	5	76.7	5	149.6	4	15.8	15.7	17.2	24	1
HUNTINGTON BANCSHARES	612.5	5	1211.8	7	92.3	10	181.8	13	15.1	14.3	15.1	21	
KEYCORP	1752.0	11	3435.0	11	249.0	12	484.0	11	14.2	14.1	18.1	16	1
MARSHALL & ILSLEY	543.2**	27	1076.6	28	62.2	5	137.7	18	11.4	13.9	13.3	23	2
MERCANTILE BANCORP.	645.6**	29	1303.2	32	95.0	195	198.9	86	14.7	6.4	11.7	24	1
NATIONAL CITY	2026.0	13	3895.4	10	331.2	22	435.0	–20	16.3	15.1	12.5	20	1
NORTHERN TRUST	636.0**	15	1249.9	17	87.2	16	172.1	17	13.7	13.6	19.6	26	
NORWEST	2764.8	14	5329.6	13	382.1	15	749.8	15	13.8	13.7	20.7	20	
OLD KENT FINANCIAL	348.2	3	694.4	8	50.0	–5	96.1	2	14.3	15.6	18.1	19	
STAR BANC	333.1	34	635.4	30	65.0	37	124.3	34	19.5	19.1	16.0	29	
U. S. BANCORP	1910.7**	10	3694.3	9	320.6	5	649.1	9	16.8	17.5	14.5	38	
(C) BANKS - SOUTH & SOUTHEAST													
GROUP COMPOSITE	19365.3	13	38113.2	13	2633.6	5	4890.4	–1	13.6	14.6	13.1	21	1
BB&T	732.8	12	1446.2	13	122.0	20	235.8	17	16.7	15.5	16.5	24	
CRESTAR FINANCIAL	562.5	13	1096.4	11	87.4	15	172.3	17	15.5	15.3	15.2	23	
FIRST AMERICAN	442.2	11	864.7	9	19.1	–67	81.1	–29	4.3	14.4	14.9	26	
FIRST TENNESSEE NATIONAL	496.0**	29	943.1	27	52.7	14	99.1	17	10.6	12.1	21.5	20	
FIRST UNION	5289.0**	13	10268.0	12	249.0	–63	1039.0	–25	4.7	14.6	10.7	23	
HIBERNIA	278.9**	16	546.0	17	42.8	18	82.4	16	15.4	15.1	13.3	18	
NATIONSBANK	7029.0	12	14040.0	14	1408.0	53	1905.0	7	20.0	14.6	13.9	18	
REGIONS FINANCIAL	575.7**	15	1138.7	16	89.6	16	175.8	16	15.6	15.4	15.6	18	
SOUTHTRUST	729.1**	17	1414.7	18	89.5	19	175.9	20	12.3	12.1	13.1	19	
SUNTRUST BANKS	1272.7	13	2518.5	14	185.0	12	365.9	12	14.5	14.7	12.0	22	
UNION PLANTERS	469.6**	7	914.4	5	78.3	15	152.9	14	16.7	15.5	13.5	22	
WACHOVIA	1487.8**	13	2922.5	14	209.9	7	405.2	4	14.1	15.0	12.8	29	
(D) BANKS - WEST & SOUTHWEST													
GROUP COMPOSITE	10112.7	7	20144.9	7	1388.1	15	2723.5	9	13.7	12.7	13.9	21	
BANKAMERICA	6240.0	8	12456.0	9	890.0	11	1725.0	9	14.3	13.8	16.5	20	
FIRST SECURITY	469.5**	25	912.1	25	55.9	9	117.3	16	11.9	13.6	15.8	18	
PACIFIC CENTURY FINANCIAL	332.2**	10	659.1	11	3.1	91	37.1	–48	0.9	11.8	9.3	16	
UNIONBANCAL	660.0	7	1296.7	7	102.1	16	192.1	11	15.5	14.3	15.4	14	
WELLS FARGO	2411.0**	1	4821.0	0	337.0	48	652.0	15	14.0	9.5	9.8	26	1
4 CHEMICALS													
INDUSTRY COMPOSITE	36705.6	–2	71389.8	–2	3209.2	–8	6017.5	–7	8.7	9.2	17.5	23	
AIR PRODUCTS & CHEMICALS (3)	1225.3	7	2433.9	6	138.1	19	258.6	16	11.3	10.1	20.2	16	
ARCO CHEMICAL	882.0	–8	1816.0	–9	110.0	214	202.0	143	12.5	3.7	12.8	25	
BETZDEARBORN	320.0	–1	619.3	–2	18.4	–13	33.9	–15	5.8	6.5	17.9	14	
CABOT (3)	376.3	–6	833.3	0	33.3	16	70.7	22	8.8	7.2	14.8	19	
CROMPTON & KNOWLES	474.3	–4	951.6	–2	39.8	25	71.7	23	8.4	6.4	258.7	17	
CYTEC INDUSTRIES	365.8	16	734.0	18	34.5	24	65.7	20	9.4	8.8	29.0	13	
DOW CHEMICAL	4857.0**	–9	9686.0	–6	427.0	–25	849.0	–17	8.8	10.7	20.8	13	
DUPONT	11140.0***	–2	22105.0	–2	959.0	–16	1865.0	–14	8.6	10.0	18.4	34	
EASTMAN CHEMICAL	1165.0**	–4	2313.0	–3	97.0	8	171.0	6	8.3	7.5	15.5	16	
FERRO	348.0	–4	687.8	–2	18.4	NM	35.5	NM	5.3	NM	29.2	16	
FULLER (H.B.) (1)	342.0	4	652.6	3	11.3	1	17.2	2	3.3	3.4	11.6	19	
GEON	330.7	–1	655.2	3	4.8	-21	10.6	26	1.5	1.8	10.8	22	

RPORATE SCOREBOARD

PANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY		
	2ND QUARTER 1998 $ MIL.	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL.	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL.	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL.	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-24	12 MONTHS' EARNINGS PER SHARE
E (W. R.)	369.9	–2	710.7	–4	25.5	–68	37.3	–59	6.9	21.3	NA	7	2.54
T LAKES CHEMICAL	401.9	13	736.7	9	37.9	14	55.2	–7	9.4	9.3	5.0	34	1.14
A (M. A.)	595.6	7	1187.1	10	13.0	–24	28.4	–12	2.2	3.1	11.1	12	1.33
JLES	445.0	–11	875.0	–12	74.0	–1	102.0	–44	16.6	14.9	38.6	15	2.48
LOBAL	1221.8	17	1898.6	11	87.0	–1	135.0	6	7.1	8.4	4.7	33	0.78
NATIONAL FLAVORS & FRAGRANCES	365.3	–4	738.7	–3	55.9	–12	118.5	–6	15.3	16.6	22.1	22	1.94
ZOL	406.0	–6	806.3	–2	40.0	–15	69.6	–19	9.8	10.8	17.1	12	2.42
NNIUM CHEMICALS	408.0	–50	807.0	–50	43.0	–48	93.0	–9	10.5	10.1	11.6	12	2.33
ANTO	2470.0	18	4514.0	14	257.0	3	453.0	–1	10.4	11.9	6.3	NM	0.46
ON INTERNATIONAL (6)	620.6**	–2	1290.1	1	35.6	–33	96.1	–18	5.7	8.5	13.6	15	1.57
CHEMICAL	403.0	14	770.1	12	42.0	5	80.0	5	10.4	11.3	24.6	15	2.17
	613.1	–3	1186.2	–3	38.6	0	77.7	–3	6.3	6.1	17.3	13	3.05
AIR	1234.0	5	2435.0	4	108.0	1	210.0	0	8.8	9.1	19.0	19	2.54
& HAAS	990.0**	–9	1927.0	–7	180.0	54	289.0	31	18.2	10.7	27.1	14	7.59
TS (3)	367.5**	23	798.1	24	24.4	16	57.8	18	6.6	7.1	16.7	23	1.60
TIA	745.0	–3	1465.0	–2	72.0	16	136.0	7	9.7	8.1	NM	18	1.59
INDUSTRIES	1259.2**	3	1724.9	4	50.6	–44	32.3	–65	4.0	7.4	18.1	4	1.98
CARBIDE	1459.0	–12	3020.0	–9	118.0	–38	260.0	–25	8.1	11.5	23.7	13	4.08
	504.3	–12	1011.7	–11	15.2	–36	35.6	–18	3.0	4.1	12.7	19	1.40
ONGLOMERATES													
STRY COMPOSITE	**45375.7**	**11**	**87206.6**	**10**	**3536.4**	**14**	**6468.6**	**16**	**7.8**	**7.6**	**21.8**	**32**	**2.21**
HENY TELEDYNE	1019.1	6	2021.3	2	75.5	–13	102.4	–35	7.4	9.1	19.9	15	1.33
SIGNAL	3869.0	8	7515.0	9	350.0	15	650.0	15	9.0	8.5	26.3	20	2.20
ER INTERNATIONAL	783.4	15	1531.9	14	11.9	14	23.3	15	1.5	1.5	10.4	21	0.86
	356.3	–3	712.2	0	31.6	NM	66.1	NM	8.9	NM	28.8	13	2.18
RAL ELECTRIC	25070.0**	14	47696.0	13	2450.0	13	4341.0	13	9.8	9.8	25.1	35	2.62
URT GENERAL (2)	1036.8**	18	1937.4	18	–17.3	NM	–31.7	NM	NM	0.3	–21.1	NM	–2.33
DUSTRIES	2154.4	–4	4297.9	–3	69.3	–16	124.9	–2	3.2	3.7	13.3	37	0.90
	472.5**	5	857.3	–2	27.1	35	38.8	26	5.7	4.4	14.9	16	1.64
5)	289.2	5	548.2	2	7.9	NM	35.5	425	2.7	NM	12.9	28	0.77
AY	325.5	14	629.7	17	16.3	39	5.9	–72	5.0	4.1	7.3	39	1.89
ARK INTERNATIONAL	675.3	14	1291.7	13	32.3	14	56.2	14	4.8	4.8	12.0	19	1.71
CO	1996.0	5	3805.0	8	137.0	32	212.0	18	6.9	5.5	15.5	16	2.31
ON	2953.0**	11	5671.0	9	164.0	13	306.0	13	5.6	5.4	17.7	21	3.53
	3027.9	6	6122.5	11	125.8	–6	255.2	1	4.2	4.7	–3.0	NM	–0.34
	281.3	0	548.7	1	–2.1	NM	202.6	NM	NM	0.9	42.6	6	2.15
	657.1	7	1259.9	6	40.6	52	56.0	51	6.2	4.3	21.5	22	1.20
MAN	409.0	4	761.0	5	16.4	46	24.5	44	4.0	2.9	8.1	NM	0.22
ONSUMER PRODUCTS													
STRY COMPOSITE	**75413.7**	**6**	**147001.8**	**6**	**6170.3**	**–3**	**11326.6**	**–7**	**8.2**	**8.9**	**25.2**	**34**	**1.69**
PPAREL													
P COMPOSITE	**8281.9**	**3**	**16425.0**	**3**	**201.9**	**–47**	**435.6**	**–50**	**2.4**	**4.7**	**9.1**	**37**	**1.00**
N GROUP (11)	402.3**	3	765.0	2	3.9	151	–8.8	NM	1.0	0.4	–9.2	NM	–1.06
OF THE LOOM	628.0	–2	1085.2	–5	65.3	227	96.5	127	10.4	3.1	–65.3	NM	–4.60
APPAREL GROUP	308.6	16	692.3	18	25.0	30	63.6	30	8.1	7.2	31.0	19	1.29
OOD (8)	504.4	13	878.1	15	16.6	8	19.0	10	3.3	3.4	11.1	16	1.95
AIBORNE	565.2	5	1221.2	8	31.0	7	76.8	8	5.5	5.4	20.4	14	2.81
7)	2307.8	–3	4531.8	–6	–67.7	NM	5.5	–99	NM	6.6	12.3	34	1.35
VEST GROUP (11)	448.3	10	915.3	16	7.3	–58	4.4	–82	1.6	4.3	15.2	13	1.82
PS-VAN HEUSEN (11)	295.8	3	632.7	–5	–4.5	NM	–47.8	NM	NM	NM	–31.3	NM	–2.45
K INTERNATIONAL	760.6	–10	1640.7	–7	6.1	–70	2.8	–95	0.8	2.4	15.9	18	1.32
LL	271.8	1	528.1	0	6.6	–19	8.4	–57	2.4	3.0	6.6	25	1.18
	1350.3	8	2676.5	6	86.8	10	164.9	11	6.4	6.3	18.4	16	2.88
ACO GROUP	438.9	51	858.1	58	25.5	49	50.2	42	5.8	5.9	4.6	63	0.60
PPLIANCES & HOME FURNISHINGS													
P COMPOSITE	**11540.0**	**16**	**24497.6**	**17**	**328.6**	**9**	**735.8**	**19**	**2.8**	**3.0**	**11.6**	**30**	**1.40**
RONG WORLD INDUSTRIES	555.6	–4	1098.7	0	56.1	–5	102.6	–2	10.1	10.2	22.1	15	4.50
UY (10)	1943.7	21	4795.8	21	15.7	NM	79.8	NM	0.8	NM	13.9	22	2.26
T CITY GROUP (10)	1924.7	15	4510.7	14	13.3	4	70.7	–13	0.7	0.8	6.7	44	1.13
URE BRANDS INTERNATIONAL	470.1	6	975.4	9	21.1	28	42.7	27	4.5	3.7	20.7	20	1.41
MEYERS (10)	668.9**	18	1303.7	25	10.2	–26	–18.9	NM	1.5	2.4	–9.5	NM	–1.06
DY (8)	322.0	12	602.5	13	19.9	27	31.4	23	6.2	5.4	12.9	19	2.79
T & PLATT	855.4	19	1648.6	18	63.4	22	121.3	21	7.4	7.2	17.8	24	1.16
G	1021.7	25	2062.1	28	68.0	55	140.3	70	6.7	5.4	45.0	19	2.51
	1192.8	4	2451.1	1	–20.1	NM	17.0	–69	NM	2.5	14.6	41	1.32
POOL	2585.0	25	5049.0	24	81.0	31	149.0	43	3.1	3.0	–0.1	NM	–0.05
VERAGES													
P COMPOSITE	**18353.1**	**6**	**33743.5**	**8**	**2284.5**	**10**	**3798.1**	**4**	**12.4**	**12.1**	**33.3**	**43**	**1.46**
SER-BUSCH	3006.3	0	5513.8	1	391.2	3	656.4	3	13.0	12.7	28.9	22	2.43
I-FORMAN (8)	395.9	7	814.1	7	44.1	11	89.7	10	11.1	10.8	22.9	23	2.67
DAIGUA WINE (10)	312.9	2	595.5	5	13.6	36	23.7	48	4.4	3.3	12.5	18	2.79
OLA	5151.0	1	9608.0	4	1191.0	–9	2048.0	–11	23.1	25.9	50.7	54	1.55

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY	PRICE-EARNINGS RATIO	12 MONT EARNI PE SHA
	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6-30	/-24	
COCA-COLA ENTERPRISES	3687.0	27	6645.0	32	111.0	0	60.0	–23	3.0	3.8	6.3	91	0.3
COORS (ADOLPH)	541.9	4	956.1	4	39.5	–23	49.3	–16	7.3	9.8	10.1	20	1.9
PEPSICO	5258.0	3	9611.0	3	494.0	181	871.0	76	9.4	3.5	30.7	33	1.2
(D) PERSONAL CARE													
GROUP COMPOSITE	**17803.4**	**3**	**34457.2**	**2**	**1567.2**	**14**	**3094.9**	**10**	**8.8**	**7.9**	**31.8**	**37**	**1.9**
ALBERTO-CULVER (3)	467.5	2	922.7	3	21.2	10	40.7	10	4.5	4.2	16.4	21	1.3
AVON PRODUCTS	1247.2	2	2430.6	5	111.4	17	80.4	–41	8.9	7.8	148.0	40	2.1
CLOROX (6)	819.7	8	1500.2	6	98.2	32	174.1	24	12.0	9.8	27.5	34	2.8
COLGATE-PALMOLIVE	2256.5	–2	4416.0	–1	203.5	16	399.5	16	9.0	7.6	36.8	40	2.4
DIAL	366.8	5	701.8	5	25.6	26	48.5	25	7.0	5.8	25.8	25	0.9
ECOLAB	468.5	14	904.8	15	37.7	15	68.3	16	8.0	8.0	26.2	29	1.0
GILLETTE	2325.0	2	4350.0	0	372.0	11	640.0	12	16.0	14.2	27.9	44	1.2
PROCTER & GAMBLE (6)	9277.0	4	18158.0	2	686.0	12	1647.0	10	7.4	6.8	30.2	34	2.5
REVLON	575.3	7	1073.1	5	11.7	39	–3.6	NM	2.0	1.6	NM	40	1.3
(E) TOBACCO													
GROUP COMPOSITE	**19435.4**	**3**	**37878.6**	**2**	**1788.1**	**–19**	**3262.1**	**–24**	**9.2**	**11.6**	**23.9**	**19**	**2.0**
PHILIP MORRIS	14786.0	3	28942.0	2	1799.0	–2	3181.0	–12	12.2	12.8	36.6	17	2.3
RJR NABISCO HOLDINGS	4292.0	0	8239.0	2	–130.0	NM	–150.0	NM	NM	5.7	–2.7	NM	–0.1
UST	357.4	0	697.6	1	119.1	2	231.1	6	33.3	32.9	91.9	11	2.4
7 CONTAINERS & PACKAGING													
INDUSTRY COMPOSITE	**8991.7**	**3**	**17437.2**	**4**	**228.9**	**9**	**392.8**	**38**	**2.5**	**2.4**	**6.2**	**55**	**0.9**
(A) GLASS, METAL & PLASTIC													
GROUP COMPOSITE	**3283.4**	**0**	**6059.9**	**1**	**154.9**	**–7**	**208.6**	**–7**	**4.7**	**5.1**	**11.2**	**21**	**2.0**
BALL	645.6	0	1195.3	6	19.0	–9	24.3	–13	2.9	3.2	8.5	27	1.1
CROWN CORK & SEAL	2245.0	–2	4137.4	–2	125.7	–5	167.4	–2	5.6	5.8	10.0	21	2.1
SILGAN HOLDINGS	392.8	10	727.2	11	10.2	–27	16.9	–33	2.6	3.9	NM	13	2.1
(B) PAPER													
GROUP COMPOSITE	**5708.3**	**4**	**11377.3**	**5**	**74.0**	**73**	**184.3**	**200**	**1.3**	**0.8**	**2.7**	**NM**	**0.5**
AVERY DENNISON	871.5	3	1715.1	2	57.4	16	111.6	14	6.6	5.9	26.1	29	2.1
BEMIS	470.6	–2	922.1	–4	30.2	8	52.1	9	6.4	5.8	16.6	19	2.1
JEFFERSON SMURFIT	844.0	8	1688.0	8	11.0	NM	22.0	NM	1.3	NM	NM	43	0.5
MAIL-WELL	350.1	40	668.8	33	11.3	27	20.8	32	3.2	3.5	14.7	26	0.7
ROCK-TENN (3)	320.1	7	647.9	13	11.8	90	21.6	NM	3.7	2.1	10.2	13	1.1
SONOCO PRODUCTS	637.6	–11	1310.9	–6	73.9	61	120.4	38	11.6	6.4	4.3	NM	0.5
STONE CONTAINER	1273.8	6	2539.2	7	–156.2	NM	–225.3	NM	NM	NM	NM	NM	–4.9
TEMPLE-INLAND	940.7	4	1885.3	7	34.6	122	61.0	112	3.7	1.7	4.1	35	1.1
8 DISCOUNT & FASHION RETAILING													
INDUSTRY COMPOSITE	**118179.8**	**12**	**261214.5**	**11**	**3103.2**	**42**	**9049.5**	**29**	**2.6**	**2.1**	**15.0**	**31**	**1.1**
AMES DEPARTMENT STORES (11)	499.0**	15	1268.4	11	–2.1	NM	27.5	86	NM	NM	22.3	13	1.1
AUTOZONE (4)	743.7	17	1350.8	15	53.9	17	88.3	17	7.3	7.2	17.7	26	1.1
BARNES & NOBLE (11)	666.3	12	1634.9	11	–3.3	NM	66.5	14	NM	NM	12.2	45	0.9
BJ'S WHOLESALE CLUB (11)	773.4	14	1773.0	15	10.2	44	42.6	29	1.3	1.0	15.5	21	1.1
BORDERS GROUP (11)	545.3	18	1404.1	18	3.8	850	82.7	24	0.7	0.1	13.7	33	1.6
BRADLEES (11)	286.6**	6	739.3	2	–24.7	NM	1.3	NM	NM	NM	NM	NM	–1.8
BRYLANE (11)	347.6	6	693.5	22	12.3	29	26.3	68	3.5	2.9	27.3	15	2.1
CALDOR (11)	529.6	1	1339.7	–2	–31.0	NM	–74.1	NM	NM	NM	NM	NM	–7.1
CDW COMPUTER CENTERS	408.9	34	793.5	32	15.6	23	30.4	26	3.8	4.2	24.7	19	2.1
COLE NATIONAL (11)	271.8	13	537.4	12	6.1	82	11.9	NM	2.2	1.4	16.3	22	1.1
CONSOLIDATED STORES (11)	823.3	6	2439.4	8	0.8	NM	68.7	–51	0.1	NM	8.3	42	0.1
COSTCO (4)	5338.1**	10	11133.1	11	85.2	29	211.2	29	1.6	1.4	15.1	33	1.1
DAYTON HUDSON (11)	6468.0**	10	15421.0	10	160.0	27	516.0	51	2.5	2.1	17.8	28	1.6
DILLARD'S (11)	1729.9**	11	3845.6	9	63.1	8	174.4	3	3.6	3.7	9.5	14	2.1
DOLLAR GENERAL (11)	705.3	36	1566.4	31	30.4	58	95.4	35	4.3	3.7	25.5	47	0.1
FAMILY DOLLAR STORES (4)	585.8	18	1221.7	19	31.3	36	58.9	37	5.4	4.6	17.2	35	0.1
FEDERATED DEPARTMENT STORES (11)	3456.0**	1	8515.8	1	60.0	149	439.5	40	1.7	0.7	11.4	19	2.1
FINGERHUT	428.3	8	795.6	7	12.7	28	18.2	46	3.0	2.5	10.7	22	1.1
FOOTSTAR	462.6	9	863.5	8	17.4	15	22.7	13	3.8	3.5	19.6	17	2.1
GAP (11)	1719.7	40	3885.2	34	136.1	61	351.7	38	7.9	6.8	34.6	40	1.1
GLOBAL DIRECTMAIL	330.5	27	688.8	29	7.6	–35	20.5	–14	2.3	4.5	12.5	14	0.1
HILLS STORES (11)	362.9	3	993.9	2	–10.6	NM	10.2	NM	NM	NM	–4.7	NM	–0.1
HOME DEPOT (11)	7123.2	26	12854.4	21	337.3	30	644.6	26	4.7	4.6	16.6	55	0.1
HOMEBASE (11)	348.9	–3	677.3	1	0.1	–96	–3.8	NM	0.0	0.6	–0.8	NM	–0.1
INTIMATE BRANDS (11)	770.9	9	2168.1	16	41.0	25	200.6	5	5.3	4.7	52.3	20	1.1
KMART (11)	7515.0	3	17274.0	2	47.0	236	233.0	–6	0.6	0.2	5.1	29	0.1
KOHL'S (11)	744.6	24	1822.4	26	26.8	75	99.4	48	3.6	2.5	15.5	52	0.1
LIMITED (11)	2008.1	10	5276.5	10	79.5	219	164.7	–31	4.0	1.4	12.9	29	0.1
LOWE'S (11)	2899.5	21	5297.1	19	94.5	34	167.0	33	3.3	2.9	14.1	35	1.1
MAY DEPARTMENT STORES (11)	2817.0**	5	7109.0	5	110.0	12	555.0	7	3.9	3.7	20.3	20	1.1
MERCANTILE STORES (11)	688.3**	1	1702.1	2	16.8	–13	89.1	9	2.4	2.8	7.8	23	1.1
MICHAELS STORES (11)	335.8	4	842.9	3	5.5	74	30.9	171	1.6	1.0	7.0	32	1.1
MICRO WAREHOUSE	521.5	4	1073.2	4	–5.0	NM	4.7	–70	NM	1.6	–13.4	NM	–1.1
NEIMAN MARCUS GROUP (5)	547.7**	8	1256.1	8	24.0	16	57.5	24	4.4	4.1	16.3	17	1.1

RPORATE SCOREBOARD

PANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY	PRICE-EARNINGS	12 MONTHS' EARNINGS
	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL.	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6 30	RATIO 7-24	PER SHARE
STROM (11)	1070.6**	9	2551.8	10	32.3	0	91.5	22	3.0	3.3	13.5	26	1.21
E DEPOT	1697.5	11	3678.6	11	45.7	50	101.5	47	2.7	2.0	13.8	29	1.14
EMAX (11)	1061.1	19	2169.4	17	19.1	21	59.1	29	1.8	1.8	7.9	20	0.74
SS SHOESOURCE (11)	681.0	6	1250.5	7	37.8	17	55.2	16	5.6	5.0	15.7	18	3.49
EY (J. C.) (11)	7052.0**	5	16803.0	11	174.0	25	398.0	71	2.5	2.1	8.0	27	2.21
OYS-MANNY, MOE & JACK (11)	584.2	19	1086.6	16	10.1	–57	–17.7	NM	1.7	4.7	4.4	29	0.59
MART (11)	496.6	20	1007.2	16	0.2	NM	4.6	–32	0.0	NM	–9.2	NM	–0.27
ITT'S (11)	855.9**	6	2006.0	31	20.9	58	55.7	95	2.4	1.6	7.1	35	0.88
STORES (11)	484.3	9	1056.6	11	27.9	17	68.5	23	5.8	5.4	31.6	19	2.45
HOLDINGS (11)	582.9**	12	1254.5	12	8.7	–31	325.8	449	1.5	2.4	38.7	5	4.96
, ROEBUCK	10247.0	6	19410.0	5	336.0	187	469.0	57	3.3	1.2	22.0	15	3.43
CE MERCHANDISE	685.1	–22	1279.3	–18	–6.3	NM	–30.4	NM	NM	NM	1.8	28	0.06
EL	684.0	–2	1274.6	–2	–2.4	NM	–25.5	NM	NM	NM	–3.6	NM	–0.16
'S AUTHORITY (11)	347.2	8	770.2	10	–3.7	NM	4.3	–78	NM	0.8	4.8	28	0.50
STORES (11)	272.8	42	642.2	46	9.0	27	26.6	49	3.3	3.7	17.0	24	1.32
ES (11)	1517.5	31	3067.4	32	31.3	272	95.6	73	2.1	0.7	15.1	56	0.60
TS (11)	271.5**	13	583.7	7	14.5	–12	4.2	–87	5.4	6.8	1.0	NM	0.13
1)	1775.8	14	4018.7	15	87.8	81	186.4	50	4.9	3.1	31.2	25	1.01
R' US (11)	2043.0	6	7026.0	7	19.0	–34	397.0	–4	0.9	1.5	11.0	13	1.67
FFICE PRODUCTS (8)	681.6	10	1347.6	11	6.2	–4	21.7	42	0.9	1.1	3.0	36	0.36
OR GROUP (11)	1466.0	–5	3468.0	–3	–5.0	NM	110.0	–10	NM	1.1	14.9	11	1.40
ART STORES (11)	29819.0	17	65205.0	16	828.0	27	2115.0	21	2.8	2.6	19.7	39	1.64
.ECTRICAL & ELECTRONICS													
STRY COMPOSITE	42411.0	3	83912.6	5	316.8	–92	2987.6	–63	0.7	9.9	9.6	37	1.39
ECTRICAL PRODUCTS													
P COMPOSITE	6532.1	–4	13142.0	–3	–74.9	NM	357.4	–64	NM	7.6	12.4	22	2.03
R INDUSTRIES	1429.3	3	2772.4	3	106.0	0	198.0	8	7.4	7.6	15.4	14	3.38
	1712.0	–10	3399.0	–8	114.0	–10	219.0	–4	6.7	6.6	23.4	11	6.01
AL SIGNAL	401.6	–26	776.1	–26	30.8	–10	54.1	–8	7.7	6.4	25.8	16	2.65
.L	372.5	6	712.2	5	44.1	7	84.0	8	11.9	11.7	16.5	22	1.99
AL SERVICE INDUSTRIES (4)	521.6	1	1001.0	–1	28.1	–4	51.6	4	5.4	5.7	19.7	22	2.55
EM (6)	431.1	–7	876.3	–2	22.1	–63	61.6	–52	5.1	12.8	20.8	15	2.07
ELL INTERNATIONAL (3)	1664.0	3	3605.0	3	–420.0	NM	–311.0	NM	NM	7.4	–2.2	NM	–0.49
ECTRONICS													
P COMPOSITE	17296.5	12	33532.8	15	–924.5	NM	–386.1	NM	NM	6.5	1.9	NM	0.35
L INSTRUMENT	488.5	8	905.4	5	30.0	NM	–29.9	NM	6.1	0.1	–4.3	NM	–0.35
(6)	979.7	–6	1940.6	–1	–23.2	NM	36.7	–70	NM	6.5	8.3	25	1.66
ELECTRONICS	1369.0	19	2660.0	22	56.1	–83	109.8	–68	4.1	28.1	2.3	NM	0.47
INDUSTRIES (5)	1143.0	4	2116.9	3	46.8	11	87.4	12	4.1	3.8	15.0	16	3.68
LA	7023.0	–7	13909.0	–2	–1328.0	NM	–1148.0	NM	NM	3.6	–4.6	NM	–0.95
MM (3)	875.5	68	1636.0	48	5.8	–84	31.9	–39	0.7	6.9	8.7	47	1.34
ON	5077.8	53	9652.1	55	269.5	29	484.5	23	5.3	6.3	5.9	30	1.95
ASSOCIATES (3)	340.0	–6	712.8	2	18.5	–65	41.5	–41	5.4	14.6	17.7	11	3.04
TRUMENTS													
COMPOSITE	3706.6	15	7184.9	20	222.2	20	395.3	22	6.0	5.7	11.2	33	1.55
GROUP (8)	272.5	78	479.1	75	5.0	49	6.3	11	1.8	2.2	23.5	22	0.88
N COULTER	434.7	61	834.1	66	9.5	–54	1.1	–97	2.2	7.7	NM	NM	–10.93
VELL	2035.2	3	3958.5	8	125.8	28	222.1	28	6.2	5.0	21.2	20	4.03
NIX (7)	557.9	3	1075.5	5	42.5	15	76.8	17	7.6	6.8	10.5	19	1.61
NE	406.2	40	837.8	56	39.4	57	89.0	111	9.7	8.6	17.0	12	2.03
MICONDUCTORS & OTHER COMPONENTS													
COMPOSITE	14875.8	–5	30052.8	–3	1094.0	–54	2621.0	–49	7.4	15.1	15.0	31	1.74
ED MICRO DEVICES	526.5	–11	1067.4	–7	–64.6	NM	–127.3	NM	NM	1.7	–8.9	NM	–1.20
	1352.8	–8	2747.7	–4	54.8	–49	157.4	–25	4.1	7.3	14.0	16	1.85
DEVICES (2)	333.1	11	663.8	12	48.4	15	92.7	14	14.5	14.0	15.9	20	1.10
	288.2	28	548.6	15	–44.5	NM	–70.5	NM	NM	12.2	–19.9	NM	–1.37
	292.0	–7	597.0	–3	17.4	–50	47.1	–28	6.0	11.1	13.8	12	1.33
	5927.0	–1	11928.0	–4	1172.0	–29	2445.0	–33	19.8	27.6	26.5	26	3.24
CUIT (4)	309.6	25	640.3	36	17.3	19	37.4	46	5.6	5.9	30.2	17	1.94
	330.1	–1	655.0	2	32.0	–30	62.5	–26	9.7	13.8	8.6	21	0.97
TECHNOLOGY (4)	609.9	–37	1365.3	–26	–106.1	NM	–154.2	NM	NM	10.0	–2.6	NM	–0.36
5)	398.1	–4	807.3	1	45.8	–3	92.2	2	11.5	11.4	14.4	23	1.15
L SEMICONDUCTOR (7)	510.0	–24	1160.0	–16	–212.4	NM	–190.1	NM	NM	NM	–5.3	NM	–0.62
ON (4)	1278.2	30	2465.0	34	49.2	18	98.0	24	3.8	4.2	17.5	31	1.58
STRUMENTS	2167.0	–15	4353.0	–10	43.0	–81	54.0	–83	2.0	8.8	0.5	NM	0.07
& BETTS	553.3	–5	1054.6	–7	41.5	3	76.8	7	7.5	6.9	15.6	15	2.91

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-24	1 MON EARN PE SHA
	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %			
10 FOOD													
INDUSTRY COMPOSITE	97895.3	6	190046.7	6	2302.0	2	4902.8	39	2.4	2.5	19.2	29	1.2
(A) FOOD DISTRIBUTION													
GROUP COMPOSITE	16407.1	3	32212.1	3	161.7	-18	317.3	-4	1.0	1.2	13.5	22	1.
ANDERSONS	282.8	13	504.0	16	6.4	50	5.5	NM	2.3	1.7	12.3	9	1.
FLEMING	3505.9	1	8073.1	-3	13.6	6	28.9	60	0.4	0.4	4.5	13	1.
INTERNATIONAL MULTIFOODS (10)	661.1	1	1299.7	0	-24.3	NM	-20.2	NM	NM	0.3	-2.2	NM	-0.
NASH FINCH	982.8**	1	1919.9	0	3.6	44	6.2	-34	0.4	0.7	-2.0	NM	-0.
PERFORMANCE FOOD GROUP	388.7	33	742.2	32	4.2	11	6.8	12	1.1	1.3	10.2	19	1.
RICHFOOD HOLDINGS (8)	1001.2	-10	1745.1	-9	7.6	-64	25.2	-31	0.8	1.9	16.9	19	1.
SMART & FINAL	380.6	14	714.9	11	1.3	-81	0.4	-97	0.3	2.0	-2.4	NM	-0.
SUPERVALU (10)	5202.6	3	9500.1	6	51.8	4	103.4	1	1.0	1.0	18.8	13	3.
SYSCO (6)	4001.4	8	7713.2	8	97.5	7	161.1	6	2.4	2.5	23.7	27	0.
(B) FOOD PROCESSING													
GROUP COMPOSITE	39492.0	4	76773.6	5	1559.4	8	3301.7	74	3.9	3.8	19.9	29	1.
AGRIBRANDS INTERNATIONAL (4)	351.1	-6	684.1	-7	3.4	-48	5.4	-31	1.0	1.8	1.0	NA	
ARCHER DANIELS MIDLAND (6)	4046.8	13	8327.0	19	62.7	-49	133.1	-28	1.6	3.4	6.2	24	0.
BESTFOODS	2114.3	0	4235.7	0	172.3	NM	305.7	170	8.1	NM	62.1	29	2.
CAMPBELL SOUP (5)	1572.0	2	3277.0	2	-36.0	NM	240.0	-39	NM	9.2	74.7	35	1.
CHIQUITA BRANDS INTERNATIONAL	744.2	15	1461.4	14	52.8	29	93.9	11	7.1	6.4	-0.5	NM	-0.
CONAGRA (7)	5881.5	1	11266.5	0	168.7	-10	307.2	-7	2.9	3.2	22.6	20	1.
CORN PRODUCTS INTERNATIONAL	366.8	3	705.8	2	10.7	NM	18.7	NM	2.9	NM	1.9	59	0.
DEAN FOODS (7)	985.1	25	1787.7	17	33.2	14	58.2	17	3.4	3.7	16.9	21	2.
DOLE FOOD	1164.0	5	2176.0	5	82.1	17	104.9	-7	7.1	6.4	20.2	20	2.
EARTHGRAINS (9)	433.0	15	877.4	15	10.9	58	18.4	109	2.5	1.8	6.9	30	1.
GENERAL MILLS (7)	1553.5	8	2978.2	9	91.8	35	222.9	17	5.9	4.7	221.8	25	2.
HEINZ (H.J.) (8)	2475.9	1	4711.9	1	181.2	NM	369.4	NM	7.3	NM	36.2	26	2.
HERSHEY FOODS	880.4	-3	1978.5	4	48.0	-5	123.4	3	5.4	5.6	37.3	28	2.
HORMEL FOODS (2)	778.3	-3	1593.2	-1	26.3	2	73.1	57	3.4	3.2	16.7	20	1.
IBP	3334.3	-3	6559.3	0	33.9	0	47.5	-28	1.0	1.0	8.0	19	1.
INTERNATIONAL HOME FOODS	402.5	61	790.9	60	21.1	124	40.4	138	5.2	3.8	58.7	40	0.
KELLOGG	1713.5	0	3356.4	-2	143.2	-12	313.9	-3	8.4	9.5	53.6	27	1.
McCORMICK (1)	435.5	5	850.7	4	16.1	9	32.3	8	3.7	3.6	26.8	26	1.
NABISCO HOLDINGS	2131.0	3	4093.0	0	-200.0	NM	-145.0	NM	NM	4.7	2.8	84	0.
PILGRIM'S PRIDE (3)	328.5	-2	652.9	2	11.8	62	18.6	52	3.6	2.2	23.0	12	1.
PIONEER HI-BRED INTERNATIONAL (4)	1317.0	2	1619.0	4	366.0	10	370.0	12	27.8	25.8	19.2	31	1.
QUAKER OATS	1381.7	-1	2474.0	-5	56.5	-25	103.5	NM	4.1	5.4	96.4	36	1.
RALSTON PURINA (3)	1072.9	3	2183.7	4	59.6	-26	146.1	5	5.6	7.7	20.8	28	1.
SMITHFIELD FOODS (8)	873.8	-6	1969.8	-2	20.7	6	44.4	26	2.4	2.1	15.7	19	.
STARBUCKS (3)	334.4	37	624.0	36	7.9	-44	23.0	-3	2.4	5.8	8.6	66	C
TYSON FOODS (3)	1953.6	23	3824.4	21	46.6	3	69.9	-25	2.4	2.8	8.0	31	C
VLASIC FOODS INTERNATIONAL (5)	320.7	-10	696.0	-6	-16.6	NM	2.2	-94	NM	4.6	37.9	NA	
WRIGLEY (WM.) JR.	545.7**	4	1019.0	4	84.5	10	160.6	15	15.5	14.6	28.3	38	2
(C) FOOD RETAILING													
GROUP COMPOSITE	41996.2	10	81061.0	9	580.8	-7	1283.8	-1	1.4	1.6	19.4	32	0
ALBERTSON'S (11)	3848.3	7	7637.7	6	110.6	1	285.3	8	2.9	3.0	20.8	25	2
AMERICAN STORES (11)	4872.7	3	9853.3	2	65.9	92	162.0	65	1.4	0.7	13.2	21	1
BRUNO'S (11)	501.7	-27	1121.2	-22	-11.4	NM	-71.6	NM	NM	NM	NM	NM	-6
DOMINICK'S SUPERMARKETS (2)	527.6	-10	1116.1	-6	3.7	-6	12.7	41	0.7	0.7	-27.2	NM	-1
FOOD LION	2353.3	1	4658.7	1	60.0	26	115.3	26	2.6	2.1	12.9	26	C
GENERAL NUTRITION (11)	327.6	20	704.5	20	30.2	27	62.8	51	9.2	8.7	34.0	22	1
GIANT FOOD (10)	983.7	6	2406.7	12	19.9	34	56.3	73	2.0	1.6	8.3	34	1
GREAT ATLANTIC & PACIFIC TEA (10)	3078.4	-1	5581.5	2	19.2	-16	32.5	-29	0.6	0.7	6.5	20	1
HANNAFORD BROTHERS	830.4	7	1618.7	5	23.0	16	40.8	15	2.8	2.6	10.7	30	1
INGLES MARKETS (3)	417.7**	8	811.2	6	3.2	-36	6.5	-39	0.8	1.3	6.2	20	1
KROGER	6441.6	3	12830.4	4	94.3	-13	146.0	-27	1.5	1.7	NM	33	1
MARSH SUPERMARKETS (9)	360.6***	5	700.0	4	3.0	4	5.8	15	0.8	0.8	8.2	14	1
MEYER (FRED) (11)	4040.4	154	5910.2	128	-95.6	NM	-42.9	NM	NM	1.4	-0.3	NM	
PENN TRAFFIC (11)	716.8**	-6	1467.4	-7	-17.1	NM	-29.9	NM	NM	NM	NM	NM	-1
RUDDICK (3)	620.5	7	1236.7	8	10.3	-21	21.7	-11	1.7	2.3	11.3	17	
SAFEWAY	5583.3	6	10972.6	18	193.2	44	358.0	40	3.5	2.6	30.9	31	1
SOUTHLAND	1868.0***	20	3254.1	10	25.8	1	13.7	-56	1.4	1.6	NM	23	
SUPERMARKETS GENERAL HOLDING (11)	916.0	-1	1856.7	-1	-8.3	NM	-29.7	NM	NM	NM	NM	NA	
WEIS MARKETS	457.6	2	912.3	1	16.7	-11	43.4	17	3.7	4.2	9.7	18	2
WINN-DIXIE STORES (6)	3250.2	6	6411.0	4	34.0	-35	95.0	-13	1.0	1.7	14.4	35	
11 FUEL													
INDUSTRY COMPOSITE	106560.6	-12	212930.2	-13	5746.3	-26	11700.0	-25	5.4	6.4	14.9	20	2
(A) COAL, OIL & GAS													
GROUP COMPOSITE	93899.1	-15	188444.6	-16	4675.2	-31	9564.7	-31	5.0	6.1	14.5	21	2
AMERADA HESS	1644.3**	-12	3567.3	-17	-21.7	NM	-34.3	NM	NM	2.2	-2.3	NM	-0
AMOCO	6727.0	-12	13360.0	-15	287.0	-54	673.0	-48	4.3	8.1	13.1	19	
ARCH COAL	350.8	79	663.6	68	15.0	28	30.8	39	4.3	6.0	6.2	30	
ASHLAND (3)	1718.0	-44	3523.0	-43	123.0	3	151.0	25	7.2	3.9	11.6	13	

RPORATE SCOREBOARD

PANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY	PRICE-EARNINGS	12 MONTHS' EARNINGS
	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6-30	RATIO 7-24	PER SHARE
TIC RICHFIELD	2546.0	-28	5082.0	-32	64.0	-84	198.0	-75	2.5	11.6	14.5	18	3.93
NGTON RESOURCES	412.0	-4	844.0	-15	23.0	-73	71.0	-67	5.6	20.1	5.7	37	0.97
ON	6766.0	-20	13378.0	-26	577.0	-30	1077.0	-35	8.5	9.7	15.2	20	4.15
AL	1924.4	-7	3880.9	-27	94.6	19	217.5	20	4.9	3.8	12.2	16	1.93
	26019.0**	-15	52800.0	-15	1620.0	-18	3510.0	-15	6.2	6.4	17.9	22	3.14
	1019.2	-1	2037.4	-5	33.1	-17	43.1	-46	3.2	3.9	7.2	23	2.89
McGEE	394.6	18	685.5	-5	26.0	-28	41.9	-56	6.6	10.8	8 8	21	2.60
	13233.0*	-21	26863.0	-18	642.0	-24	1347.0	-20	4.9	5.1	15.0	20	3.60
HY OIL	448.6**	-12	889.3	-12	22.2	-19	37.7	-35	4.9	5.4	10.3	19	2.49
ENTAL PETROLEUM	1543.0	-28	3243.0	-20	186.0	35	325.0	23	12.1	6.4	7.0	37	0.63
PS PETROLEUM	2964.0	-20	6057.0	-21	158.0	-49	401.0	-25	5.3	8.3	16.9	15	3.12
R STATE	312.9	-2	611.4	0	1.8	-77	3.4	-74	0.6	2.4	-5.2	NM	-0.50
	2190.0*	-16	4308.0	-19	92.0	-12	148.0	20	4.2	4.0	32.0	12	2.99
D	8044.0**	-30	16191.0	-31	342.0	-40	601.0	-61	4.3	5.0	13.4	19	3.09
	3168.4	-1	6215.4	11	100.3	49	141.8	101	3.2	2.1	14.4	17	1.74
MAR DIAMOND SHAMROCK	3034.0*	26	5830.6	17	-32.6	NM	-16.2	NM	NM	1.9	3.9	34	0.81
PACIFIC RESOURCES GROUP†	621.1	40	1120.1	15	-17.3	NM	13.9	-93	NM	16.7	9.1	26	0.63
L	1397.0	-16	2604.0	-16	105.0	-33	123.0	-64	7.5	9.4	19.5	19	1.80
ARATHON GROUP	5562.0*	47	11060.0	40	162.0	37	345.0	53	2.9	3.1	15.4	18	1.99
) ENERGY	1448.1	6	2810.5	29	40.0	45	34.1	-28	2.8	2.0	8.6	15	1.73
R RESOURCES	411.7	-46	819.6	-56	32.8	-44	80.8	-33	8.0	7.6	36.6	21	2.04
TROLEUM SERVICES													
P COMPOSITE	**12661.5**	**15**	**24485.6**	**18**	**1071.1**	**9**	**2135.3**	**22**	**8.5**	**8.9**	**18.3**	**18**	**2.09**
HUGHES (3)	1113.0	21	2270.4	28	81.7	-1	161.0	15	7.3	9.0	5.9	33	0.78
/ICES (3)	365.3**	-1	760.9	7	32.9	17	71.5	48	9.0	7.6	15.8	7	3.12
R CAMERON	502.7**	14	929.6	14	45.1	32	78.3	46	9.0	7.7	23.4	13	2.96
ND OFFSHORE DRILLING	323.5	42	609.6	41	111.7	71	192.4	58	34.5	28.5	20.7	14	2.41
R INDUSTRIES (2)	1981.4	12	3693.7	7	93.0	24	155.1	22	4.7	4.2	19.5	18	1.97
ATHERFORD	530.8	11	847.7	32	-14.9	NM	16.4	-73	NM	9.6	11.3	18	1.52
MARINE	356.0	53	631.1	42	73.4	-13	141.6	-13	20.6	36.1	33.4	9	1.65
JRTON	2475.6**	11	4830.9	17	136.5	34	254.3	38	5.5	4.6	19.5	18	1.98
CON	281.0	26	560.4	32	60.4	0	130.2	24	21.5	27.3	21.0	15	1.08
MBERGER	2853.3	10	5653.4	13	359.4	17	710.1	25	12.6	11.8	19.9	22	2.74
NTERNATIONAL	557.7	6	1136.7	12	-7.5	NM	26.1	-51	NM	5.3	16.8	14	1.99
TER (9)	284.9	24	563.5	33	62.8	30	126.3	38	22.0	20.9	25.8	7	4.24
IONTAIGNE OIL (8)	489.5	38	960.3	38	0.5	-84	2.2	-52	0.1	0.9	5.2	45	0.30
N ATLAS	546.7	31	1037.4	30	36.2	118	69.9	114	6.6	4.0	13.3	43	1.60
EALTH CARE													
RY COMPOSITE	**87300.4**	**12**	**171313.5**	**12**	**7968.8**	**74**	**16578.8**	**41**	**9.1**	**5.9**	**23.9**	**39**	**1.75**
UG DISTRIBUTION													
COMPOSITE	**28571.0**	**14**	**56187.8**	**15**	**415.6**	**258**	**1014.7**	**80**	**1.5**	**0.5**	**13.6**	**42**	**1.17**
URCE HEALTH (3)	2094.5	1	4286.8	11	16.5	160	32.7	68	0.8	0.3	92.1	26	2.61
BRUNSWIG (3)	3514.6**	20	6888.2	18	27.2	22	46.0	8	0.8	0.8	12.7	30	1.72
WESTERN INDUSTRIES	1848.0	2	3809.8	11	8.2	47	15.7	42	0.4	0.3	8.0	24	1.31
L HEALTH (6)	4384.3	27	7765.8	24	65.4	6	121.7	17	1.5	1.8	15.6	44	2.17
	3755.9	10	7357.4	8	16.2	NM	148.2	NM	0.4	NM	14.1	54	0.80
RUG STORES (11)	752.8	6	1561.9	2	14.2	1	35.6	-1	1.9	2.0	9.8	18	1.50
ON (9)	4943.0**	14	9615.1	15	42.1	12	77.8	5	0.9	0.9	11.3	49	1.63
RE	358.2	51	698.5	55	8.1	-41	28.5	10	2.3	5.8	6.1	56	0.71
(10)	3032.7	14	6223.3	17	90.8	33	210.5	71	3.0	2.6	11.4	31	1.29
EN (4)	3887.0	14	7981.0	14	127.0	17	298.0	17	3.3	3.2	18.2	46	0.99
IGS & RESEARCH													
COMPOSITE	**31225.4**	**11**	**61235.1**	**10**	**5636.2**	**112**	**11536.4**	**51**	**18.0**	**9.4**	**33.2**	**39**	**2.07**
ABORATORIES	3066.8	6	6111.7	4	585.6	12	1175.2	11	19.1	18.0	43.0	31	1.43
N	331.3	15	610.2	12	34.8	63	-87.4	NM	10.5	7.4	0.2	NM	0.02
N HOME PRODUCTS	3342.0	-5	7008.4	-1	523.5	14	1505.7	45	15.7	13.1	27.9	28	1.90
	656.9	6	1262.3	6	216.3	8	403.6	6	32.9	32.3	30.4	30	2.51
MYERS SQUIBB	4430.0	9	8876.0	9	835.0	13	1762.0	14	18.8	18.2	47.6	35	3.35
	288.2	14	544.2	7	25.4	71	14.5	-53	8.8	5.9	3.5	92	0.19
)	2340.7	18	4609.8	17	491.3	NM	1019.6	NM	21.0	NM	40.3	39	1.74
	6470.4	9	12529.2	9	1316.1	14	2480.5	14	20.3	19.5	37.4	31	4.00
	3633.0	25	6972.0	18	628.0	37	1320.0	25	17.3	15.7	30.2	60	1.89
CIA & UPJOHN	1691.0	-3	3303.0	-3	146.0	-18	335.0	-10	8.6	10.2	5.1	91	0.53
-PLOUGH	2124.0	23	4032.0	23	455.0	22	905.0	21	21.4	21.7	50.8	45	2.16
DRICH	294.6	6	600.8	8	41.1	1	85.3	4	14.0	14.6	15.5	18	1.66
LAMBERT	2556.7	30	4775.6	28	338.1	46	617.4	42	13.2	11.8	35.2	64	1.25
LTH-CARE SERVICES													
COMPOSITE	**15464.3**	**13**	**30325.2**	**13**	**416.5**	**-10**	**1124.2**	**0**	**2.7**	**3.4**	**4.3**	**60**	**0.43**
ENTERPRISES	715.4	-12	1409.8	-14	21.5	3	39.6	0	3.0	2.6	6.7	18	0.56
VHCA HEALTHCARE	4781.0	-1	9682.0	-2	173.0	-55	392.0	-53	3.6	7.9	-3.5	NM	-0.36
Y HEALTH CARE	583.8	94	914.0	52	-27.8	NM	-23.0	NM	NM	2.2	-4.0	NM	-0.31
SCRIPTS	807.4	169	1178.8	110	9.6	18	19.4	23	1.2	2.7	16.5	35	2.22
IANAGEMENT ASSOCIATES (3)	302.2	30	605.1	29	38.7	25	79.2	26	12.8	13.3	18.2	47	0.51
IUTH	942.5	30	1850.1	31	117.2	44	226.6	55	12.4	11.2	12.4	25	1.05

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY	PRICE-EARNINGS	MC
	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL.	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6-30	RATIO 7-24	EA
INTEGRATED HEALTH SERVICES	816.9**	78	1672.0	82	41.5	350	79.6	181	5.1	2.0	3.3	NM	
LABORATORY CORP. OF AMERICA HOLDINGS	386.1	–1	759.1	–3	12.8	212	22.1	245	3.3	1.1	NM	NM	–1
PHYCOR	376.3	41	699.0	35	15.3	12	7.8	–70	4.1	5.1	–2.0	NM	–0
QUEST DIAGNOSTICS	366.7	–9	734.6	–7	8.9	10	15.5	28	2.4	2.0	–3.5	NM	–0
TENET HEALTHCARE (7)	2571.0	9	5135.0	12	–24.0	NM	124.0	NM	NM	NM	10.2	25	1
UNIVERSAL HEALTH	474.6**	38	937.7	37	20.5	21	46.1	20	4.3	4.9	12.6	24	2
VENCOR	778.7	0	1602.0	10	–23.5	NM	–4.6	NM	NM	4.8	6.4	5	0
WELLPOINT HEALTH NETWORKS	1561.8	8	3146.0	18	32.8	–33	99.9	1	2.1	3.4	17.1	22	3
(D) MEDICAL PRODUCTS GROUP COMPOSITE	**12039.6**	**7**	**23565.4**	**6**	**1500.5**	**12**	**2903.6**	**20**	**12.5**	**11.8**	**23.2**	**36**	**1**
BARD (C. R.)	300.6	–1	596.9	–1	40.2	53	65.1	24	13.4	8.6	14.7	27	1
BAUSCH & LOMB	635.0	21	1188.1	22	55.5	173	6.1	–74	8.7	3.9	4.0	88	0
BAXTER INTERNATIONAL	1646.0	5	3114.0	3	63.0	–61	227.0	NM	3.8	10.3	21.1	29	2
BECTON, DICKINSON (3)	833.6	18	1572.0	12	–10.0	NM	82.4	–46	NM	9.9	15.9	46	1
BOSTON SCIENTIFIC	505.7	7	975.7	8	78.7	NM	145.6	200	15.6	NM	21.8	57	
GUIDANT	487.8	73	958.1	75	78.7	NM	134.0	212	16.1	1.5	38.5	49	
JOHNSON & JOHNSON	5783.0	1	11566.0	1	1005.0	11	2015.0	11	17.4	16.0	27.3	30	2
MEDTRONIC (8)	685.1**	7	1316.4	6	160.1	10	167.4	–39	23.4	22.7	22.4	65	4
OWENS & MINOR	799.0	3	1596.9	5	0.1	–97	6.9	–36	0.0	0.7	10.6	25	1
U.S. SURGICAL	363.9	25	681.2	19	29.1	63	54.1	14	8.0	6.2	7.6	37	
13 HOUSING & REAL ESTATE													
INDUSTRY COMPOSITE	22261.1	20	40648.4	18	1324.4	3	2072.5	5	5.9	6.9	16.3	17	2
(A) BUILDING MATERIALS GROUP COMPOSITE	**13087.0**	**12**	**24172.9**	**12**	**1005.1**	**8**	**1540.3**	**11**	**7.7**	**7.9**	**22.2**	**17**	**2**
AMERICAN STANDARD	1795.0	13	3288.0	11	78.0	5	114.0	7	4.3	4.7	NM	26	
JOHNS MANVILLE	445.2	4	834.6	3	65.0	75	91.0	41	14.6	8.7	21.2	15	4
LAFARGE	674.8	41	1009.6	40	85.0	42	45.3	76	12.6	12.6	17.4	13	4
MARTIN MARIETTA MATERIALS	277.7	20	464.3	19	36.4	20	39.0	–1	13.1	13.1	16.4	24	
MASCO	1085.0	19	2124.0	20	117.0	28	227.6	30	10.8	10.0	17.5	12	3
NORTEK	449.6	101	842.1	101	8.5	10	9.8	–21	1.9	3.4	20.1	14	
OWENS CORNING	1286.0	26	2423.0	28	59.0	–6	67.0	–36	4.6	6.2	NM	87	3
PPG INDUSTRIES	2004.0	3	3917.0	5	199.0	–9	391.0	2	9.9	11.2	26.7	16	3
RPM (7)	452.0	11	802.5	14	32.7	15	38.2	7	7.2	6.9	15.5	19	3
SHERWIN-WILLIAMS	1377.8	0	2481.9	2	99.5	7	124.6	7	7.2	6.8	16.7	21	3
SOUTHDOWN	317.7	9	542.6	9	–23.1	NM	–7.4	NM	NM	15.3	7.7	27	5
TECUMSEH PRODUCTS	500.4	4	960.3	0	33.9	7	58.8	–7	6.8	6.6	9.5	12	1
USG	775.0	7	1510.0	8	82.0	204	149.0	255	10.6	3.7	114.4	11	1
VALSPAR (2)	292.5	16	517.8	17	20.0	17	28.8	15	6.8	6.8	21.9	25	3
VULCAN MATERIALS	465.8	5	824.8	5	70.0	12	106.5	26	15.0	14.1	21.8	17	2
YORK INTERNATIONAL	888.5	0	1630.5	–3	42.3	0	57.0	0	4.8	4.8	6.8	37	1
(B) CONSTRUCTION & REAL ESTATE GROUP COMPOSITE	**9174.1**	**34**	**16475.5**	**29**	**319.3**	**–11**	**532.1**	**–8**	**3.5**	**5.2**	**9.1**	**19**	**0**
CENTEX (9)	1110.6	29	2249.9	24	48.2	78	92.2	64	4.3	3.1	16.7	16	5
CHAMPION ENTERPRISES	582.5	32	1045.5	30	25.8	43	43.4	37	4.4	4.1	23.6	15	4
FLEETWOOD ENTERPRISES (8)	842.4	13	1553.0	13	28.3	34	49.5	42	3.4	2.8	20.7	12	0
HORTON (D. R.) (3)	613.8	40	1066.8	39	23.1	48	42.6	53	3.8	3.6	25.9	17	2
KAUFMAN & BROAD HOME (1)	537.5	30	963.7	26	17.2	61	25.3	67	3.2	2.6	16.7	18	3
LENNAR (1)	532.1	96	972.8	93	25.6	101	41.8	86	4.8	4.7	13.7	18	3
M. D. C. HOLDINGS	303.6	28	546.8	27	12.6	145	20.5	135	4.1	2.2	15.1	13	4
OAKWOOD HOMES (3)	475.5**	63	751.7	48	5.0	78	12.6	–69	1.0	7.7	11.1	17	2
PULTE	679.7	18	1200.3	19	23.6	86	34.5	148	3.5	2.2	8.2	18	4
RYLAND GROUP	425.9	7	762.2	5	8.8	128	13.5	141	2.1	1.0	8.9	13	3
STARWOOD HOTELS & RESORTS	2307.0**	56	4010.0	42	70.0	–62	98.0	–65	3.0	12.3	2.1	NA	10
U. S. HOME	367.5	8	702.1	7	13.4	22	33.0	56	3.7	3.2	12.1	9	1
WEBB (DEL) (6)	396.1	14	650.8	4	17.6	32	25.1	10	4.4	3.8	12.3	11	1
14 LEISURE TIME INDUSTRIES													
INDUSTRY COMPOSITE	32953.0	6	63066.3	4	2002.6	2	3767.4	18	6.1	6.3	10.1	38	0
(A) EATING PLACES GROUP COMPOSITE	**9126.2**	**7**	**17414.3**	**5**	**544.0**	**–8**	**1105.9**	**4**	**6.0**	**6.9**	**15.7**	**33**	**3**
BRINKER INTERNATIONAL (6)	422.9	14	823.9	15	23.1	20	39.2	21	5.5	5.2	12.0	19	2
CKE RESTAURANTS (11)	528.2	124	853.0	110	22.7	115	35.3	110	4.3	4.5	11.3	32	2
CRACKER BARREL OLD COUNTRY STORE (5)	317.4	15	639.2	18	24.7	21	45.0	23	7.8	7.5	13.1	18	2
DARDEN RESTAURANTS (7)	921.2	13	1732.4	7	40.0	NM	69.8	NM	4.3	NM	10.0	26	2
FOODMAKER (3)	280.6**	11	590.5	18	12.6	26	47.0	181	4.5	4.0	50.5	9	2
HOST MARRIOTT SERVICES	322.6	10	599.9	8	6.2	22	2.3	188	1.9	1.7	NM	24	2
McDONALD'S	3180.8	12	5985.7	10	233.8	–47	596.0	–24	7.4	15.5	15.8	33	2
OUTBACK STEAKHOUSE	342.3	19	666.3	19	24.7	28	46.9	29	7.2	6.7	15.5	26	2
SHONEY'S (2)	279.3	–5	616.0	–6	–1.4	NM	–11.0	NM	NM	1.8	NM	NM	2
TRICON GLOBAL RESTAURANTS	2001.0	–15	3922.0	–15	112.0	–7	166.0	–4	5.6	5.1	NM	NA	2
WENDY'S INTERNATIONAL	530.0	–2	985.5	–1	45.6	–20	69.4	–15	8.6	10.6	9.9	25	2

RPORATE SCOREBOARD

IPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-24	12 MONTHS' EARNINGS PER SHARE
	2ND QUARTER 1998 $ MIL.	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL.	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL.	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL.	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %			
NTERTAINMENT													
JP COMPOSITE	**9665.0**	**6**	**19030.4**	**4**	**137.6**	**–55**	**530.0**	**–16**	**1.4**	**3.3**	**6.6**	**46**	**0.85**
JS CIRCUS ENTERPRISES (11)†	334.9	5	639.9	7	21.6	–42	22.3	–58	6.5	11.8	6.5	19	0.78
EY (WALT) (3)	5248.0	1	10490.0	–2	415.0	–12	799.0	–1	7.9	9.1	10.6	39	0.95
AH'S ENTERTAINMENT	478.6	17	893.1	14	37.0	46	61.9	46	7.7	6.2	16.7	16	1.25
O-GOLDWYN-MAYER	279.5	82	596.0	70	–55.0	NM	–73.6	NM	NM	NM	–12.7	NM	–3.86
OM	3323.9	10	6411.4	8	–281.0	NM	–279.6	NM	NM	NM	2.2	90	0.74
IOTEL & MOTEL													
JP COMPOSITE	**4644.7**	**14**	**8832.3**	**13**	**325.2**	**30**	**557.2**	**29**	**7.0**	**6.1**	**9.8**	**27**	**1.01**
N HOTELS	1413.0	4	2809.0	5	106.0	14	183.0	14	7.5	6.8	7.7	26	1.00
MARRIOTT	402.0**	49	747.0	43	66.0	154	96.0	200	16.4	9.6	8.6	34	0.51
IOTT INTERNATIONAL	2539.0	16	4731.0	15	101.0	20	190.0	24	4.0	3.8	13.6	24	1.35
IUS HOTEL	290.7	12	545.3	5	52.2	10	88.2	2	18.0	18.2	8.3	36	1.13
THER LEISURE													
JP COMPOSITE	**9517.1**	**0**	**17789.2**	**0**	**995.8**	**21**	**1574.4**	**47**	**10.5**	**8.7**	**13.2**	**39**	**1.19**
ICAN GREETINGS (10)	487.9	3	1087.2	0	33.8	12	88.5	6	6.9	6.4	14.4	18	2.62
SWICK	1113.0	10	2009.7	9	83.4	1	142.3	5	7.5	8.2	11.6	13	1.57
IVAL (1)	661.4	11	1219.2	9	160.6	26	270.5	27	24.3	21.4	19.1	31	1.22
MAN KODAK	3541.0	–8	6452.0	–8	495.0	35	720.0	39	14.0	9.6	6.5	NM	0.67
EY-DAVIDSON	517.2**	17	983.7	13	55.4	13	100.1	12	10.7	11.2	20.2	33	1.20
RO	572.1	–2	1054.9	–7	5.5	–58	13.2	–66	1.0	2.2	6.3	45	0.84
EL	861.5	–11	1566.7	–6	60.4	–20	73.1	NM	7.0	7.8	26.8	25	1.64
LAND STORES	367.2	7	759.6	6	–4.7	NM	–8.2	NM	NM	NM	307.4	11	1.34
IIS INDUSTRIES	274.7	10	484.7	2	14.5	9	22.8	–10	5.3	5.3	36.2	16	2.38
OID	464.7	–18	855.3	–16	12.1	–65	–5.3	NM	2.6	6.1	–41.4	NM	–4.04
CARIBBEAN CRUISES	656.5	63	1316.2	65	79.8	74	157.3	86	12.2	11.4	11.9	28	2.89
MANUFACTURING													
STRY COMPOSITE	**56451.3**	**10**	**107753.2**	**11**	**3749.2**	**15**	**5906.0**	**5**	**6.6**	**6.3**	**18.5**	**21**	**1.99**
ENERAL MANUFACTURING													
P COMPOSITE	**19676.8**	**8**	**37974.9**	**8**	**1420.8**	**6**	**2678.8**	**12**	**7.2**	**7.4**	**21.1**	**19**	**2.51**
UIP-VICKERS	574.3	3	1121.4	2	37.8	13	69.0	76	6.6	6.0	22.9	11	4.59
LE	395.6	17	758.7	21	24.6	17	43.5	27	6.2	6.2	21.2	18	2.59
INDUSTRIES	394.8	23	769.2	22	39.7	67	64.9	43	10.0	7.4	NM	12	1.69
NG	867.9**	–5	1671.8	–4	56.7	–55	118.8	–44	6.5	13.7	24.4	21	1.47
	563.4	9	1090.2	11	36.6	25	66.5	28	6.5	5.6	21.8	19	2.76
(9)	544.5	11	1083.2	8	–6.1	NM	–11.1	NM	NM	NM	6.8	20	0.89
NE BRANDS	1213.8	7	2330.2	8	87.9	NM	140.9	259	7.2	0.4	3.5	47	0.81
O	456.3	7	857.3	5	33.1	34	57.4	34	7.2	5.8	15.0	18	2.41
L	273.5	13	530.3	16	20.0	32	37.0	59	7.3	6.3	32.7	9	2.00
BRAND INDUSTRIES (1)	508.0	19	987.0	13	45.0	22	88.0	16	8.9	8.7	19.2	23	2.48
S TOOL WORKS	1420.5	7	2761.5	8	176.0	14	324.6	17	12.4	11.6	20.8	24	2.52
ON CONTROLS (3)	3189.5	11	6196.8	10	83.9	13	136.4	87	2.6	2.6	17.1	17	3.16
IS	298.9	1	467.2	4	37.6	–2	48.1	0	12.6	12.9	45.4	15	1.51
V INDUSTRIES (10)	604.5	8	1159.4	7	26.9	–11	51.2	–4	4.5	5.4	14.1	13	1.62
SOTA MINING & MFG.	3770.0	–1	7470.0	–1	386.0	–8	786.0	–5	10.2	11.0	34.4	15	5.02
L	922.7	13	1693.2	15	88.7	15	237.6	107	9.6	9.4	23.5	21	2.54
HANNIFIN (6)	1238.4	11	2434.9	13	90.4	–2	173.7	2	7.3	8.3	19.2	12	2.88
RMAID	658.5	3	1308.2	5	52.5	13	61.6	–24	8.0	7.3	11.8	40	0.82
AIR	670.0	45	1101.0	24	35.6	–7	62.6	–17	5.3	8.3	13.7	28	1.33
EX	363.0	30	708.8	29	21.2	16	41.1	17	5.9	6.5	15.7	19	1.99
AUTOMOTIVE	465.9	42	923.0	104	23.7	80	42.6	114	5.1	4.0	12.7	16	1.43
WARE	282.9	–17	551.7	–16	23.0	–39	38.4	–39	8.1	11.1	38.3	28	0.96
CHINE & HAND TOOLS													
COMPOSITE	**5192.0**	**12**	**9986.9**	**14**	**285.8**	**98**	**–476.6**	**NM**	**5.5**	**3.1**	**0.1**	**NM**	**–0.04**
& DECKER	1169.7	–1	2178.0	–1	58.4	28	–913.0	NM	5.0	3.8	NM	NM	–8.00
NATI MILACRON	490.6	9	968.0	17	20.9	15	38.5	23	4.3	4.0	18.6	10	2.19
ER	622.3	24	1156.7	19	46.2	21	84.2	21	7.4	7.6	16.9	31	1.40
METAL (6)	501.0	60	997.5	64	23.3	4	44.1	4	4.7	7.2	9.9	13	2.58
ELECTRIC	310.9	4	613.9	6	25.2	11	49.0	12	8.1	7.6	19.1	12	1.84
INDUSTRIES	614.2	14	1213.5	19	26.3	77	50.4	185	4.3	2.8	21.2	11	11.55
N	458.1**	7	901.5	10	22.7	–42	56.6	–22	4.9	9.1	15.7	17	2.20
Y WORKS	691.8	3	1363.7	3	42.2	NM	78.6	NM	6.1	NM	10.0	63	0.70
	333.5	44	594.1	45	20.6	168	35.0	202	6.2	3.3	177.5	12	2.29
ECIAL MACHINERY													
COMPOSITE	**26629.0**	**11**	**50002.8**	**13**	**1955.4**	**22**	**3473.0**	**34**	**7.3**	**6.7**	**20.2**	**20**	**2.19**
	816.1	–6	1517.6	–4	32.4	–34	65.1	–15	4.0	5.6	16.9	7	2.53
MATERIALS (2)	1176.3	31	2484.0	43	141.2	38	370.1	181	12.0	11.3	23.1	16	1.95
	1734.0**	8	3115.0	10	126.0	–9	195.0	–3	7.3	8.6	16.1	8	5.03
LLAR	5604.0	15	10398.0	14	446.0	3	876.0	6	8.0	8.9	34.2	11	4.57
IS ENGINE	1635.0	17	3135.0	16	53.0	0	60.0	–36	3.2	3.8	12.5	11	4.60
2)	4069.6**	16	6915.7	17	365.2	14	568.5	15	9.0	9.1	24.2	10	4.10
	1235.1	7	2383.7	10	100.1	–20	190.0	–7	8.1	10.8	21.1	18	1.74
RVE	280.7	–7	539.0	–4	12.5	–50	25.6	–38	4.5	8.3	9.6	26	0.87

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY	PRICE-EARNINGS	1 MON EARN PE
	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6-30	RATIO 7-24	SHA
FMC	1155.1	0	2194.1	2	67.6	12	94.4	15	5.9	5.3	–1.6	NM	–0.
HARNISCHFEGER INDUSTRIES (2)	478.6	–33	1046.4	–22	–72.8	NM	–97.8	NM	NM	5.4	–2.7	NM	–0.
INGERSOLL-RAND	2186.2	19	4189.1	20	140.9	26	240.0	27	6.4	6.1	18.0	17	2.
McDERMOTT INTERNATIONAL (9)	819.8	–12	1744.6	5	121.6	11	138.2	NM	14.8	11.8	32.7	8	3.
PENTAIR	471.8	12	936.8	12	24.4	19	48.1	21	5.2	4.9	15.9	17	2.
STEWART & STEVENSON SERVICES (11)	305.0	31	639.3	23	9.2	74	–20.5	NM	3.0	2.3	–2.2	NM	–0.
TIMKEN	701.7	4	1409.1	7	38.7	–14	87.8	2	5.5	6.6	16.3	9	2.
TORO (2)	379.7	8	589.7	5	20.1	5	19.0	–12	5.3	5.4	12.0	12	2.
TYCO INTERNATIONAL (3)	3235.0	27	6087.0	23	320.2	131	596.4	109	9.9	5.4	18.0	NA	
UNOVA	345.2	–16	678.6	–7	9.2	NM	17.0	NM	2.7	NM	3.8	50	0.
(D) TEXTILES													
GROUP COMPOSITE	**4953.5**	**10**	**9788.7**	**11**	**87.1**	**–44**	**230.8**	**–19**	**1.8**	**3.5**	**12.9**	**26**	**0.**
BURLINGTON INDUSTRIES (3)	511.0	–8	1029.0	–6	26.0	92	50.5	46	5.1	2.4	10.8	9	1.
COLLINS & AIKMAN	463.3	11	941.5	13	–0.5	NM	8.2	–64	NM	2.8	NM	NM	–0.
DEXTER	302.6	3	592.5	5	16.4	3	30.6	6	5.4	5.5	14.8	12	2.
GALEY & LORD (3)	275.3	104	512.9	94	4.7	13	8.8	10	1.7	3.1	9.5	17	0.
INTERFACE	316.9	17	635.8	20	11.7	47	21.9	53	3.7	2.9	11.2	20	0.
MOHAWK INDUSTRIES	546.4	15	1006.2	14	30.6	59	45.4	63	5.6	4.1	18.8	20	1.
PILLOWTEX	332.0	217	698.4	219	7.1	279	12.7	261	2.1	1.8	7.8	32	1.
SHAW INDUSTRIES	873.1	–5	1738.1	1	–65.2	NM	–45.7	NM	NM	2.8	–11.5	NM	–0
SPRINGS INDUSTRIES	537.1	2	1093.8	2	5.5	–64	2.4	–91	1.0	2.9	6.1	18	2
UNIFI (6)	358.7	–17	704.7	–19	35.1	12	68.4	9	9.8	7.3	20.3	13	2.
WESTPOINT STEVENS	437.0	10	835.7	11	15.8	48	27.5	40	3.6	2.7	NM	28	1.
16 METALS & MINING													
INDUSTRY COMPOSITE	**22436.9**	**–3**	**44510.1**	**–1**	**735.6**	**–38**	**1752.5**	**–22**	**3.3**	**5.2**	**11.0**	**16**	**1.**
(A) ALUMINUM													
GROUP COMPOSITE	**7260.2**	**0**	**14273.6**	**2**	**116.0**	**–66**	**441.8**	**–23**	**1.6**	**4.8**	**11.0**	**21**	**2.**
ALUMAX	779.8	7	1555.1	9	2.8	–92	46.8	–25	0.4	4.9	1.1	NM	0.
ALUMINUM CO. OF AMERICA	3587.0	5	7032.1	6	207.1	0	417.0	14	5.8	6.0	19.5	14	5.
KAISER ALUMINUM	614.8	3	1211.8	6	16.7	22	28.7	76	2.7	2.3	40.1	12	0.
MAXXAM	699.6	2	1363.6	3	12.4	61	14.3	–56	1.8	4.6	NM	11	5.
REYNOLDS METALS	1579.0**	–12	3111.0	–9	–123.0	NM	–65.0	NM	NM	3.1	–1.1	NM	–0.
(B) STEEL													
GROUP COMPOSITE	**10228.3**	**1**	**20337.7**	**3**	**455.2**	**–20**	**832.9**	**–9**	**4.5**	**5.6**	**13.9**	**9**	**1.**
AK STEEL HOLDING	612.0	–2	1200.2	–2	33.4	–14	61.8	–16	5.5	6.3	15.7	7	2.
ARMCO	450.1	–8	897.8	–4	31.1	54	51.4	74	6.9	4.1	NM	8	0.
BETHLEHEM STEEL	1189.7	–1	2322.2	–3	37.6	–77	106.2	–46	3.2	13.3	11.6	8	1.
CARPENTER TECHNOLOGY (6)	318.3	12	647.3	21	26.2	15	48.3	26	8.2	8.0	12.8	13	1.
COMMERCIAL METALS (4)	606.1**	3	1174.3	5	11.4	20	19.7	18	1.9	1.6	10.6	11	1.
INLAND STEEL INDUSTRIES	724.9	–1	1465.8	5	15.5	–19	32.0	–13	2.1	2.6	8.1	17	2
LTV	1093.0	0	2220.0	3	4.0	–85	23.0	–57	0.4	2.5	0.4	94	0.
NATIONAL STEEL	747.8	–9	1456.2	–8	26.5	–59	32.4	–65	3.5	7.9	18.0	3	5.
NUCOR	1128.4	9	2267.2	11	72.2	–1	137.4	0	6.4	7.1	15.2	12	1.
ROUGE INDUSTRIES	306.0	–14	625.0	–9	6.2	–42	10.2	–49	2.0	3.0	2.8	19	1.
USX-U.S. STEEL GROUP	1733.0	0	3429.0	2	136.0	40	223.0	21	7.8	5.6	26.2	5	4.
WALTER INDUSTRIES (7)	536.0	34	989.8	34	24.5	13	32.2	66	4.6	5.4	16.4	17	3.
WEIRTON STEEL	336.4	–7	677.7	–5	5.2	NM	7.4	NM	1.5	NM	11.3	9	1.
WORTHINGTON INDUSTRIES (7)	446.7	10	965.2	8	25.5	31	47.8	16	5.7	4.8	12.1	17	2.
(C) OTHER METALS													
GROUP COMPOSITE	**4948.3**	**–13**	**9898.8**	**–11**	**164.4**	**–41**	**477.9**	**–37**	**3.3**	**4.9**	**7.7**	**24**	**1.**
ASARCO	602.3	–19	1235.7	–15	–14.5	NM	–46.3	NM	NM	7.0	0.3	NM	0.
CYPRUS AMAX MINERALS	619.0	–26	1351.0	–22	–36.0	NM	–32.0	NM	NM	7.8	–4.6	NM	–1.
ENGELHARD	1074.5**	20	2045.1	15	50.9	15	94.1	15	4.7	4.9	7.6	51	1.
ESSEX INTERNATIONAL	369.6	–18	755.0	–13	17.7	–24	39.4	–8	4.8	5.2	25.1	10	3.
FREEPORT-McMORAN COPPER & GOLD	433.9	–23	830.0	–24	34.7	–56	70.4	–53	8.0	13.9	NM	23	0.
GENERAL CABLE	306.7	5	585.3	8	18.1	51	31.6	53	5.9	4.1	47.4	17	7.
NEWMONT GOLD	374.0	11	752.0	–3	27.4	NM	60.2	NM	7.3	NM	8.5	24	3.
NEWMONT MINING	374.0	–11	752.0	–3	25.7	NM	56.5	NM	6.9	NM	8.5	24	3.
PHELPS DODGE	794.4	–25	1592.7	–24	40.4	–70	204.1	–25	5.1	12.7	13.0	10	3.
17 NONBANK FINANCIAL													
INDUSTRY COMPOSITE	**125937.2**	**15**	**246558.3**	**15**	**11484.9**	**10**	**23855.9**	**17**	**9.1**	**9.6**	**16.2**	**20**	
(A) FINANCIAL SERVICES													
GROUP COMPOSITE	**72434.6**	**20**	**140217.5**	**19**	**6378.9**	**13**	**12760.9**	**18**	**8.8**	**9.3**	**20.3**	**21**	
AMERICAN EXPRESS	4761.0**	8	9282.0	8	577.0	11	1037.0	6	12.1	11.8	22	25	
ASSOCIATES FIRST CAPITAL	2295.1	12	4526.2	14	292.9	20	573.9	19	12.8	12.0	16.8	25	
BEAR STEARNS (6)	2246.2	27	4173.9	27	172.3	6	338.6	3	7.7	9.2	20.1	13	
BLOCK (H&R) (8)	975.9	11	1184.6	14	256.9	20	239.5	20	26.3	24.3	13.0	26	
CAPITAL ONE FINANCIAL	600.4	52	1174.3	45	66.9	70	132.6	62	11.1	9.9	22.5	32	
CHICAGO TITLE	477.7	36	878.7	33	10.7	–36	31.9	40	2.2	4.8	NA	17	
CIT GROUP	558.9	11	1097.9	10	83.7	–11	165.4	1	15.0	18.7	12.1	17	
COUNTRYWIDE CREDIT INDUSTRIES (10)	768.0	80	1497.2	106	90.8	30	175.9	27	11.8	16.4	16.5	16	

RPORATE SCOREBOARD

IPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY		
	2ND QUARTER 1998 $ MIL.	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL.	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL.	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL.	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-24	MONTHS' EARNINGS PER SHARE
ALDSON, LUFKIN & JENRETTE	2339.4	29	4599.0	35	142.3	42	276.5	48	6.1	5.5	23.8	15	3.74
& BRADSTREET	484.0	10	955.1	9	39.7	–17	91.1	8	8.2	10.8	NM	15	1.83
ARDS (A. G.) (10)	570.2	30	1097.8	23	76.0	39	149.1	31	13.3	12.4	19.5	13	2.97
FAX	393.5	15	746.6	14	50.6	–17	95.4	–4	12.9	17.8	55.5	33	1.25
IE MAE	7753.7**	13	15154.9	12	850.4	13	1682.9	13	11.0	10.9	25.0	21	3.06
ITY NATIONAL FINANCIAL	289.1	59	525.7	56	30.0	206	45.4	239	10.4	5.4	30.1	12	3.11
/A GROUP	278.3	16	538.1	17	41.0	22	80.1	22	14.7	14.1	13.3	24	2.61
' AMERICAN FINANCIAL	704.3**	56	1309.3	57	45.1	144	90.1	321	6.4	4.1	28.8	15	2.44
KLIN RESOURCES (3)	672.6**	17	1346.3	23	131.0	18	257.7	21	19.5	19.4	24.2	22	2.04
DIE MAC	4318.0	20	8303.0	18	414.0	22	807.0	21	9.6	9.4	24.2	23	2.11
ER FINANCIAL	334.0	4	668.0	18	51.0	16	99.0	19	15.3	13.7	10.5	NA	NA
EHOLD INTERNATIONAL	2119.3	5	4261.9	4	–501.6	NM	–143.8	NM	NM	11.9	1.3	56	0.87
AMERICA FINANCIAL GROUP	505.6	224	762.6	165	28.7	259	33.5	278	5.7	5.1	9.5	16	3.89
AN BROTHERS HOLDINGS (1)	5554.0	46	10134.0	30	324.0	168	511.0	93	5.8	3.2	17.7	12	6.17
H & McLENNAN	1750.0	14	3526.0	24	193.0	33	424.0	37	11.0	9.4	14.7	32	1.89
ILL LYNCH	9381.0	17	18547.0	20	545.0	13	1063.0	12	5.8	6.0	23.1	19	5.05
AN STANLEY DEAN WITTER (1)	8428.0	32	16013.0	24	854.0	62	1545.0	41	10.1	8.3	22.9	19	4.87
WEBBER GROUP	1900.3**	17	3705.4	18	129.5	39	250.2	29	6.8	5.7	20.6	16	2.95
OND JAMES FINANCIAL (3)	275.8	31	543.3	27	22.8	33	47.5	–14	8.3	8.2	20.5	15	1.95
'AB (CHARLES)	798.6	20	1558.6	18	76.3	19	144.3	10	9.6	9.6	24.1	39	1.04
IOLDING	805.7	–14	1643.5	–12	144.2	24	283.2	22	17.9	12.4	89.1	15	3.19
:LERS GROUP	10096.0	10	20463.6	14	1140.6	29	2234.0	32	11.3	9.6	17.4	22	3.01
ISURANCE													
IP COMPOSITE	**48307.7**	**9**	**96177.2**	**11**	**4424.5**	**2**	**9779.9**	**14**	**9.2**	**9.8**	**13.4**	**18**	**3.95**
	1703.5	–2	3460.5	0	102.7	–66	263.1	–33	6.0	17.4	13.2	21	1.64
ATE	6539.0	8	12989.0	6	885.0	38	1821.0	29	13.5	10.6	21.7	11	4.11
CAN FINANCIAL GROUP	1011.1**	5	1991.9	5	40.5	–34	107.4	–14	4.0	6.3	10.6	95	0.43
CAN GENERAL	2556.0	15	5035.0	15	264.0	NM	508.0	491	10.3	NM	11.4	19	3.82
CAN INTERNATIONAL GROUP	7538.6**	6	14650.0	7	942.0	14	1828.5	14	12.5	11.6	14.2	29	5.05
CAN NATIONAL INSURANCE	438.3	2	882.5	3	47.2	–18	113.4	–6	10.8	13.3	8.6	11	9.12
	5321.0	13	10416.0	11	308.0	10	803.0	42	5.8	5.9	15.9	11	6.04
INAT! FINANCIAL	518.6	7	1031.2	7	58.8	–22	143.0	–5	11.3	15.7	5.6	7	5.27
CO	1839.3	10	3824.1	26	–268.2	NM	–37.2	NM	NM	14.3	4.5	37	1.25
ST REINSURANCE HOLDINGS	330.4	4	633.3	4	43.5	–2	83.3	6	13.2	13.9	11.4	12	3.14
AL RE	1905.0**	–8	3794.6	–8	254.7	9	526.3	10	13.4	11.2	12.0	19	12.66
ORD FINANCIAL SERVICES GROUP	3493.0	10	7221.0	15	236.0	–59	500.0	–36	6.8	18.1	16.6	12	4.41
ORD LIFE	1155.0	11	2559.0	22	94.0	29	178.0	31	8.1	7.0	15.7	23	2.58
Y FINANCIAL	299.9**	–1	604.2	–2	29.7	–1	61.2	–6	9.9	9.9	9.9	14	2.66
N NATIONAL	1507.5	34	2954.0	27	148.7	NM	270.7	672	9.9	NM	5.0	37	2.53
RY GENERAL	305.2**	11	604.7	14	50.3	40	101.7	52	16.5	13.0	22.7	17	3.46
ASUALTY	361.1	0	719.5	0	10.0	–70	40.9	–36	2.8	9.1	7.9	14	3.17
CAPITAL	442.6	13	867.4	12	38.2	50	80.4	46	8.6	6.5	18.2	11	5.03
ESSIVE	1335.1**	19	2590.0	24	123.0	20	243.1	36	9.2	9.1	20.2	22	6.12
ENT	980.2**	–1	1967.6	26	74.8	25	145.9	45	7.6	6.0	8.7	17	2.07
	1687.6**	56	3311.1	57	69.2	–41	180.8	–21	4.1	10.8	6.8	16	2.81
ERICA (3)†	383.5**	30	739.0	35	144.9	54	278.8	54	37.8	32.0	18.7	27	2.35
MARK	623.8**	8	1228.5	7	63.1	–15	156.1	3	10.1	12.9	14.0	18	2.40
AMERICA	1543.4	8	3102.3	11	152.4	35	306.1	58	9.9	7.9	7.3	12	9.80
ATLANTIC HOLDINGS	425.2	18	800.5	14	64.7	50	112.5	33	15.2	11.9	14.8	14	6.13
ERS PROPERTY CASUALTY	2532.2	4	5126.4	5	312.5	13	659.5	20	12.3	11.4	16.7	13	3.42
	372.0	–5	792.9	3	36.2	NM	112.2	221	9.7	0.3	12.7	13	5.13
	1159.6	18	2281.1	15	98.7	13	192.2	–5	8.5	8.9	14.5	21	2.54
VINGS & LOAN													
' COMPOSITE	**5194.9**	**14**	**10163.6**	**13**	**681.5**	**36**	**1315.1**	**35**	**13.1**	**11.0**	**12.0**	**23**	**1.99**
SON (H. F.)	1031.7	7	2016.2	5	137.3	19	251.6	15	13.3	12.0	12.0	17	4.14
R ONE FINANCIAL	409.3	10	811.8	11	68.4	24	131.9	23	16.7	14.8	13.1	25	1.34
ANCORP	485.1**	32	964.4	34	58.3	110	115.5	90	12.0	7.5	13.7	20	1.55
STATE BANCORP (6)	334.5	12	635.3	7	39.3	62	71.3	51	11.7	8.1	9.2	17	1.78
WEST FINANCIAL	783.7	10	1564.9	11	117.0	34	227.0	33	14.9	12.3	14.0	13	7.10
IGTON MUTUAL	2150.6	16	4171.0	14	261.3	37	517.7	40	12.1	10.3	11.0	43	1.01
FFICE EQUIPMENT & COMPUTERS													
RY COMPOSITE	101478.4	11	198541.5	11	1028.6	–84	7276.0	–44	1.0	7.2	14.5	56	1.06
SINESS MACHINES & SERVICES													
COMPOSITE	**8576.8**	**24**	**16753.7**	**25**	**364.3**	**–1**	**755.0**	**6**	**4.2**	**5.3**	**19.1**	**23**	**1.45**
OM SYSTEMS	597.6	22	1035.3	12	4.3	–46	8.1	–37	0.7	1.6	14.9	10	0.62
	474.8	2	963.8	1	42.2	13	85.8	9	8.9	8.1	8.6	52	0.65
	280.6	–7	576.3	2	–14.4	NM	12.4	–77	NM	10.1	11.7	23	1.16
USTRIES	401.4	35	819.7	41	23.4	24	45.9	28	5.8	6.4	23.1	17	1.60
SE (2)	1327.0	21	2506.0	25	–5.3	NM	–10.7	NM	NM	0.6	1.1	71	0.21
HERMAN) (7)	465.3	13	902.0	16	38.4	40	71.4	74	8.3	6.7	55.6	21	1.39
BOWES	1079.5	7	2091.1	6	142.0	8	271.7	8	13.2	13.0	31.7	28	1.92
DS & REYNOLDS (3)	384.8	14	770.5	11	26.0	258	52.4	56	6.8	2.2	19.6	19	0.93
RD REGISTER	333.7	41	677.7	45	12.4	–27	22.1	–31	3.7	7.2	11.3	18	1.99

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS				
	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-24	MO EAR
STEELCASE (10)	672.3	1	1371.8	6	54.0	14	107.7	29	8.0	7.1	16.1	15	1
TECH DATA (11)	2184.4	59	4297.5	60	23.1	27	49.2	37	1.1	1.3	12.8	21	1
WALLACE COMPUTER SERVICES (5)	375.6	66	742.0	64	18.2	–6	39.0	–5	4.8	8.5	14.6	11	1
(B) COMPUTERS & PERIPHERALS													
GROUP COMPOSITE	**60367.1**	**5**	**118422.4**	**5**	**–1626.3**	**NM**	**1281.3**	**–82**	**NM**	**6.8**	**11.1**	**58**	**1**
APPLE COMPUTER (3)	1402.0	–19	2807.0	–16	101.0	NM	156.0	NM	7.2	NM	3.1	NM	0
COMPAQ COMPUTER	5832.0	6	11519.0	7	–3632.0	NM	–3616.0	NM	NM	4.7	–23.5	NM	–1
DATA GENERAL (3)	351.3	–10	713.1	–9	–155.1	NM	–159.6	NM	NM	3.8	–26.1	NM	–2
DELL COMPUTER (11)	3920.0	51	7657.0	53	305.0	54	590.0	53	7.8	7.7	73.8	70	1
EMC	952.0	33	1780.4	34	189.5	47	335.6	40	19.9	18.1	23.0	42	1
GATEWAY 2000	1618.9	16	3346.8	19	60.7	8	136.6	10	3.8	4.1	11.9	68	0
HEWLETT-PACKARD (2)	12040.0	16	23856.0	16	685.0	–13	1614.0	–5	5.7	7.6	17.6	20	2
INTERNATIONAL BUSINESS MACHINES	18823.0	0	36441.0	1	1452.0	0	2488.0	–6	7.7	7.7	31.8	21	6
IOMEGA	393.8	–2	801.3	5	–39.9	NM	–58.5	NM	NM	6.6	1.7	NM	0
LEXMARK INTERNATIONAL GROUP	697.3	25	1369.4	20	53.8	57	103.3	59	7.7	6.2	40.5	24	2
MICRON ELECTRONICS (4)	340.8	–33	835.5	–18	5.9	–70	30.7	–35	1.7	3.8	11.7	27	0
QUANTUM (9)	1103.0	–24	2388.7	–21	3.0	–97	5.7	–97	0.3	6.7	6.5	40	0
SEAGATE TECHNOLOGY (6)	1575.0	–20	3250.0	–27	22.0	–63	–107.0	NM	1.4	3.0	–18.4	NM	–2
SILICON GRAPHICS (6)	773.6	–33	1481.9	–28	–220.0	NM	–372.6	NM	NM	8.8	–25.2	NM	–2
STORAGE TECHNOLOGY	542.3	5	1027.2	7	54.4	1	95.0	2	10.0	10.4	20.9	20	2
SUN MICROSYSTEMS (6)	2881.1	13	5242.0	13	273.0	15	505.0	10	9.5	9.3	23.7	25	1
UNISYS	1728.5	9	3378.2	8	90.1	115	152.8	150	5.2	2.6	NM	NM	–4
WESTERN DIGITAL (6)	650.5	–40	1481.8	–32	–162.7	NM	–207.7	NM	NM	8.1	–91.3	NM	–3
XEROX	4742.0	9	9046.0	8	–712.0	NM	–410.0	NM	NM	7.7	7.9	NM	1
(C) COMPUTER SOFTWARE & SERVICES													
GROUP COMPOSITE	**32534.5**	**20**	**63365.5**	**19**	**2290.6**	**0**	**5239.7**	**3**	**7.0**	**8.4**	**18.1**	**59**	**1**
ASCEND COMMUNICATIONS	327.4	5	632.5	5	59.1	NM	111.5	NM	18.0	NM	16.8	53	
BAY NETWORKS (6)	618.3	14	1165.5	10	20.6	NM	–123.5	NM	3.3	NM	–1.5	NM	–(
CABLETRON SYSTEMS (10)	365.7	1	677.3	–9	–152.3	NM	–415.7	NM	NM	16.2	–33.7	NM	–2
CADENCE DESIGN SYSTEMS	291.8	39	562.0	41	66.4	133	40.9	–38	22.7	13.5	19.9	45	
CERIDIAN	284.1	9	566.4	8	31.3	–15	67.1	–3	11.0	14.1	5.7	NM	
CISCO SYSTEMS (5)	2183.8	33	4200.1	30	64.6	–83	521.9	–27	3.0	23.0	16.0	NM	
COMDISCO (3)	817.0	16	1579.0	16	40.0	18	77.0	15	4.9	4.8	15.5	19	
COMPUTER ASSOCIATES INTERNATIONAL (9)	1046.6	18	2514.0	20	–480.8	NM	–79.0	NM	NM	17.5	21.5	42	
COMPUTER SCIENCES (9)	1753.9	18	3623.1	20	64.3	22	144.4	13	3.7	3.5	13.6	36	
COMPUWARE (9)	338.6	51	696.4	46	58.8	108	135.4	83	17.4	12.6	28.1	49	
ELECTRONIC DATA SYSTEMS	4186.1	14	8128.1	12	221.9	869	406.1	87	5.3	0.6	16.9	19	
FIRST DATA	1304.8	–1	2537.1	–1	45.3	NM	176.0	63	3.5	NM	11.3	32	
FISERV	311.2	31	585.0	25	28.7	38	55.8	29	9.2	8.7	13.5	36	
GALILEO INTERNATIONAL	380.6	24	757.6	23	53.9	2	116.2	–2	14.2	17.3	20.3	30	
HBO & CO.	376.7	29	719.5	30	76.8	539	141.7	181	20.4	4.1	21.3	52	
INACOM	1139.3	17	2139.7	18	11.4	70	20.9	75	1.0	0.7	9.6	13	
INGRAM MICRO	4956.1	33	10106.2	37	55.6	39	112.2	40	1.1	1.1	18.8	30	
MICROSOFT (6)	3995.0	26	7769.0	22	1357.0	28	2694.0	28	34.0	33.3	28.5	68	
NCR	1574.0	–4	2883.0	–5	48.0	NM	48.0	NM	3.1	NM	5.5	47	
ORACLE (7)	2412.6	24	4161.3	25	402.8	12	617.9	17	16.7	18.5	27.5	30	
PEOPLESOFT	320.5	74	598.2	77	39.2	76	73.0	82	12.2	12.1	26.3	74	
SABRE GROUP HOLDINGS	577.0	29	1131.0	27	69.0	17	140.0	12	12.0	13.1	26.6	25	
SAFEGUARD SCIENTIFICS	602.5	20	1044.4	10	6.0	7	11.1	9	1.0	1.1	8.9	54	
SUNGARD DATA SYSTEMS	282.3	27	546.9	29	29.7	92	49.5	40	10.5	7.0	14.0	38	
3COM (7)	1375.5	0	2625.7	–7	63.6	52	77.4	–65	4.6	3.0	1.1	NM	
VANSTAR (8)	713.1	30	1416.4	32	9.6	490	20.1	119	1.4	0.3	17.3	14	
19 PAPER & FOREST PRODUCTS													
INDUSTRY COMPOSITE	24733.7	0	48915.3	1	982.7	211	1760.5	89	4.0	1.3	4.6	45	
(A) FOREST PRODUCTS													
GROUP COMPOSITE	**4286.9**	**0**	**8266.4**	**1**	**245.0**	**NM**	**239.5**	**989**	**5.7**	**NM**	**0.2**	**NM**	
GEORGIA-PACIFIC GROUP	3275.0	–1	6468.0	1	30.0	NM	46.0	NM	0.9	NM	–1.6	NM	
LOUISIANA-PACIFIC	623.2	–2	1171.5	–1	203.9	NM	178.8	461	32.7	NM	3.1	47	
UNIVERSAL FOREST PRODUCTS	388.7	12	626.9	10	*11.1	17	14.7	12	2.9	2.7	10.5	18	
(B) PAPER													
GROUP COMPOSITE	**20446.8**	**0**	**40649.0**	**1**	**737.7**	**126**	**1521.0**	**68**	**3.6**	**1.6**	**5.2**	**43**	
BOISE CASCADE	1538.5	15	3028.0	16	–64.0	NM	–64.4	NM	NM	NM	–6.7	NM	
BOWATER	395.8	11	778.9	11	18.9	166	43.7	544	4.8	2.0	7.7	21	
CHAMPION INTERNATIONAL	1473.8	5	2950.8	6	32.1	NM	51.1	NM	2.2	NM	–14.2	NM	
CONSOLIDATED PAPERS	503.4	29	1025.4	33	31.7	4	70.7	21	6.2	7.7	9.6	18	
FORT JAMES	1857.0	0	3652.6	–1	136.2	–9	253.8	3	7.3	8.1	10.4	89	
INTERNATIONAL PAPER	4700.0	–6	9600.0	–3	86.0	NM	161.0	NM	1.8	NM	4.6	33	
KIMBERLY-CLARK	3041.3	–3	6089.9	–4	300.1	–14	597.7	–16	9.9	11.2	17.8	33	
MEAD	1050.9	5	1889.9	3	40.2	–19	73.8	0	3.8	5.0	6.8	22	
POTLATCH	400.5	2	803.0	1	10.0	2	20.8	28	2.5	2.5	4.3	28	
UNION CAMP	1134.1	3	2278.6	5	18.8	77	45.5	125	1.7	1.0	5.2	28	
WESTVACO (2)	724.2	0	1426.3	–2	34.6	–9	67.1	–9	4.8	5.2	6.9	17	
WEYERHAEUSER	2676.0	–8	5279.0	–4	69.0	–37	154.0	18	2.6	3.7	7.9	24	
WILLAMETTE INDUSTRIES	946.4	8	1846.5	6	24.0	35	46.1	48	2.5	2.0	4.4	38	

RPORATE SCOREBOARD

PANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY		
	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-24	12 MONTHS' EARNINGS PER SHARE
PUBLISHING & BROADCASTING													
STRY COMPOSITE	13542.6	10	25920.0	10	3014.5	352	3580.3	230	22.3	5.4	8.0	54	1.12
ROADCASTING													
UP COMPOSITE	2062.7	12	4177.3	19	2186.6	NM	1902.2	NM	NM	NM	7.9	38	1.33
R CHANNEL COMMUNICATIONS	320.0	71	523.7	84	27.9	85	33.5	48	8.7	8.1	3.2	NM	0.68
OMMUNICATIONS	398.3	–1	814.1	4	–12.2	NM	–114.2	NM	NM	15.2	–10.5	NM	–1.01
AONE GROUP	641.0	–35	1613.0	–15	2174.0	NM	1952.0	NM	NM	NM	13.7	17	2.67
IETWORKS	703.4	165	1226.5	125	–3.0	NM	30.9	395	NM	0.9	2.0	NM	0.22
UBLISHING													
UP COMPOSITE	11479.9	9	21742.8	9	827.9	8	1678.1	20	7.2	7.3	8.1	67	1.01
(A. H.)	366.3	10	695.7	23	29.8	13	43.5	–1	8.1	7.9	6.0	20	1.08
IONES	601.1	–6	1222.6	–2	–51.7	NM	–17.0	NM	NM	5.4	NM	NM	–9.13
ETT	1304.1	10	2504.0	11	222.8	14	565.7	72	17.1	16.4	25.1	20	3.31
IT-RIDDER	779.3	9	1523.2	16	66.9	11	168.4	–29	8.6	8.4	22.5	17	3.15
AW-HILL	881.1	5	1584.5	6	77.8	19	98.0	22	8.8	7.8	21.5	28	3.09
ORK TIMES	749.2	4	1471.8	4	82.7	–3	147.4	8	11.0	11.8	16.1	25	1.39
DIA	390.0	6	735.0	2	–7.3	NM	–17.0	NM	NM	1.0	NM	NM	–1.85
ASTIC (7)	297.9	17	537.0	15	13.9	NM	10.8	NM	4.7	NM	7.7	31	1.34
PS (E. W.)	366.9	20	713.7	20	36.4	–6	61.5	–10	9.9	12.6	14.1	28	1.85
WARNER†	3672.0	15	6809.0	9	101.0	237	39.0	–52	2.8	0.9	–0.7	NM	–0.11
MIRROR	760.6	6	1478.2	6	44.0	–27	88.6	–14	5.8	8.4	110.5	28	2.22
NE	785.6	9	1458.3	11	147.6	33	217.7	24	18.8	15.4	24.4	22	3.12
INGTON POST	525.8	5	1009.7	6	63.8	–11	271.7	128	12.1	14.2	31.8	14	42.01
ERVICE INDUSTRIES													
STRY COMPOSITE	54993.3	26	105678.3	21	1649.6	204	3080.5	77	3.0	1.2	12.1	28	1.19
NSTRUCTION & ENGINEERING													
P COMPOSITE	5964.6	2	12008.4	3	186.7	NM	298.9	NM	3.1	NM	14.2	15	2.08
(2)	3282.1	3	6681.1	1	54.3	NM	109.1	NM	1.7	NM	16.5	14	3.16
R WHEELER	1033.8	0	2061.8	3	20.3	NM	37.7	127	2.0	NM	1.7	70	0.26
S ENGINEERING GROUP (3)	525.0	22	1049.8	21	13.9	16	27.2	16	2.6	2.8	15.1	16	2.01
MOTT (J. RAY) (9)	370.6	–23	783.7	0	88.4	992	99.3	NM	23.9	1.7	26.1	9	3.63
SON KNUDSEN (1)	436.1	5	821.1	2	9.1	22	17.3	20	2.1	1.8	9.8	22	0.64
& WEBSTER	317.0	11	611.0	–4	0.7	–93	8.3	–45	0.2	3.3	7.7	19	2.06
DUSTRIAL DISTRIBUTION													
P COMPOSITE	24690.3	30	48139.5	20	534.8	NM	1143.9	98	2.2	0.0	10.4	25	1.30
ANCE	1119.8	4	2223.2	4	30.8	40	59.0	37	2.8	2.0	11.5	32	1.81
ELECTRONICS	2024.0	9	4049.7	9	36.0	–30	77.9	–24	1.8	2.8	10.0	14	1.42
(6)	1544.6	10	3056.7	10	16.6	–65	57.2	–40	1.1	3.4	11.5	14	3.80
CASCADE OFFICE PRODUCTS	732.9	22	1492.7	25	13.7	17	31.3	18	1.9	2.0	11.7	16	0.95
POINT	329.8	50	673.1	61	9.1	86	17.9	74	2.7	2.2	14.1	40	0.40
AR (1)	445.7	18	852.4	34	16.6	17	30.8	53	3.7	3.8	33.0	16	1.06
	3278.2	22	6593.8	11	23.4	–27	35.8	–3	0.7	1.2	–9.3	NM	–0.63
	6517.0	100	12199.0	42	145.0	NM	359.0	NM	2.2	NM	11.4	27	2.01
E PARTS	1619.4	7	3152.5	6	85.9	3	165.9	3	5.3	5.5	18.4	18	1.93
ER (W. W.)	1119.0	6	2176.1	7	59.3	3	116.4	4	5.3	5.5	17.7	20	2.37
S SUPPLY (11)	582.0	34	1042.5	28	10.7	24	19.7	20	1.8	2.0	10.9	14	2.31
ALL INDUSTRIES (7)	417.6	29	785.7	25	6.7	–43	14.7	–32	1.6	3.6	8.3	12	1.99
USA	377.2	NA	655.7	NA	12.2	NA	19.4	NA	3.2	NA	NA	NA	NA
AL-OILWELL	294.8	26	596.7	35	23.8	115	44.9	116	8.1	4.7	25.0	15	1.45
RLD MEDICAL (9)	342.5	19	692.6	28	11.3	43	2.7	–63	3.3	2.7	4.9	50	0.30
E STEEL & ALUMINUM	326.2	34	641.7	44	12.5	49	24.3	59	3.8	3.4	12.8	15	2.45
N TULL	715.2	–2	1450.0	4	15.6	–18	31.6	–11	2.2	2.6	13.3	14	1.49
RCE WORLDWIDE (3)	1821.4	3	3689.3	6	–10.4	NM	–3.7	NM	NM	0.7	–10.7	NM	–1.29
STATIONERS	752.0	23	1464.5	18	7.2	–27	22.3	12	1.0	1.6	3.0	NM	0.42
IENTIFIC PRODUCTS	331.0	7	651.5	8	8.8	45	16.7	74	2.7	2.0	9.0	24	1.20
LLUTION CONTROL													
COMPOSITE	1857.9	40	3382.5	38	67.2	NM	217.5	NM	3.6	NM	10.2	43	0.67
WASTE INDUSTRIES	299.7	8	576.4	10	–6.4	NM	18.9	–34	NM	6.6	7.1	67	0.46
ER INTERNATIONAL	310.4**	29	615.7	21	–29.4	NM	–29.0	NM	NM	0.0	–92.9	NM	–1.42
KLEEN (4)	365.7	135	538.9	82	–24.0	NM	–20.5	NM	NM	NM	–0.6	NM	0.00
MANAGEMENT	882.0	34	1651.5	48	127.1	46	248.1	71	14.4	13.3	13.6	33	1.62
NTING & ADVERTISING													
COMPOSITE	4442.8	18	8505.7	17	372.6	63	525.1	49	8.4	6.1	19.4	29	1.72
	316.0	14	646.8	17	13.4	6	24.4	8	4.2	4.6	10.8	21	1.51
VER HOLDINGS	412.9	30	796.8	30	8.3	89	9.4	55	2.0	1.4	–43.5	NM	–1.65
EY (R. R.) & SONS	1143.6	1	2305.0	3	138.8	209	183.0	129	12.1	4.0	21.6	21	2.13
BLIC GROUP	972.4**	18	1747.7	16	116.4	25	152.2	24	12.0	11.3	23.6	28	2.08
M GROUP	1051.5	34	1912.5	29	86.0	30	136.9	29	8.2	8.4	24.7	36	1.52
COLOR PRESS	546.5	28	1096.9	24	9.8	49	19.1	42	1.8	1.5	10.3	19	1.68

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY		
	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL.	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-24	M EA
(E) OTHER SERVICES													
GROUP COMPOSITE	**18037.7**	**32**	**33642.3**	**31**	**488.3**	**10**	**895.2**	**11**	**2.7**	**3.2**	**11.8**	**31**	
ABM INDUSTRIES (2)	369.0**	25	727.8	24	7.1	21	12.8	20	1.9	2.0	13.5	23	
ACNIELSEN	346.5	-3	672.3	-1	16.1	57	17.9	192	4.6	2.9	10.6	33	
ADMINISTAFF	393.6	43	756.0	41	2.2	132	1.4	53	0.5	0.3	10.2	81	
AMKOR TECHNOLOGY	384.7	10	756.5	14	20.8	174	30.4	NM	5.4	2.2	NA	10	
CARMAX GROUP (10)	346.4	95	609.5	95	-3.2	NM	-25.3	NM	NM	NM	-10.1	NM	
CASEY'S GENERAL STORES (8)	273.1*	3	551.2	2	4.8	29	12.1	31	1.7	1.4	12.7	25	
CDI	388.8	3	767.6	4	9.4	-21	20.1	-11	2.4	3.2	18.8	14	
CINTAS (7)	329.9	24	592.8	25	31.6	6	59.2	14	9.6	11.2	19.4	43	
GROUP 1 AUTOMOTIVE	431.5	84	685.5	52	5.6	76	8.7	59	1.3	1.4	NA	18	
HANDLEMAN (8)	272.0	-2	580.2	-5	-8.5	NM	-1.5	NM	NM	0.1	0.1	NM	
INTERIM SERVICES	461.6	9	877.8	19	13.6	37	24.1	31	2.9	2.3	9.9	22	
KELLY SERVICES	1001.3	4	1960.7	7	20.6	6	35.7	6	2.1	2.0	14.6	15	
MANPOWER	2136.1	19	4009.0	21	26.2	-36	47.9	-29	1.2	2.3	21.8	17	
NORRELL (2)	352.3	11	686.6	15	9.9	17	18.0	15	2.8	2.7	11.7	22	
OLSTEN	1140.1	12	2190.1	11	-33.5	NM	-20.7	NM	NM	2.5	3.3	27	
PITTSTON BRINK'S GROUP	359.8	34	670.1	29	20.6	16	37.6	14	5.7	6.6	19.6	18	
QUINTILES TRANSNATIONAL	280.8	45	536.2	43	19.5	52	37.6	54	7.0	6.6	16.6	51	
REPUBLIC INDUSTRIES	4373.3	74	7793.2	75	127.4	80	204.5	91	2.9	2.8	7.6	38	
ROBERT HALF INTERNATIONAL	442.2	42	843.4	42	32.3	45	61.3	46	7.3	7.1	24.5	47	
SERVICE CORP. INTERNATIONAL	671.9	12	1354.6	9	90.9	15	199.7	-5	13.5	13.1	12.9	30	
SERVICEMASTER	1244.6	23	2226.4	22	56.4	21	85.7	13	4.5	4.6	35.6	26	
UNITED AUTO GROUP	897.3	70	1609.7	75	8.2	8	10.5	-4	0.9	1.4	-3.2	NM	
VINCAM GROUP	311.6	32	595.8	31	2.4	NM	4.2	269	0.8	NM	16.9	81	
VOLT INFORMATION SCIENCES (2)	412.6	19	774.1	22	4.3	-39	6.9	-43	1.0	2.1	18.7	13	
WACKENHUT	416.7	52	815.3	58	3.6	43	6.3	40	0.9	0.9	1.3	NM	
22 TELECOMMUNICATIONS													
INDUSTRY COMPOSITE	**74389.7**	**11**	**144418.7**	**11**	**5322.5**	**17**	**10829.2**	**4**	**7.2**	**6.8**	**13.7**	**42**	
(A) EQUIPMENT & SERVICES													
GROUP COMPOSITE	**37899.3**	**14**	**72886.0**	**13**	**-535.9**	**NM**	**951.6**	**-74**	**NM**	**5.5**	**3.5**	**NM**	
ADC TELECOMMUNICATIONS (2)	334.6	20	621.0	16	34.3	19	59.7	52	10.3	10.3	15.8	35	
AIRTOUCH COMMUNICATIONS†	1348.0	50	2306.0	33	180.0	51	347.0	77	13.4	13.2	6.6	63	
AT&T	12858.0	1	25489.0	1	-143.0	NM	1173.0	-42	NM	7.3	15.5	27	
CENTURY TELEPHONE ENTERPRISES†	388.4	84	760.1	86	64.2	-23	121.9	5	16.5	39.5	19.4	18	
DSC COMMUNICATIONS	388.4	1	703.3	-4	-4.7	NM	-34.8	NM	NM	10.9	-3.7	NM	
EXCEL COMMUNICATIONS	489.4	48	984.2	49	31.9	-14	59.8	-17	6.5	11.2	9.8	39	
LUCENT TECHNOLOGIES (3)	7228.0	14	13385.0	17	-233.0	NM	-210.0	NM	NM	3.4	-0.3	NM	
MCI COMMUNICATIONS	5370.0	11	10658.0	10	195.0	-30	296.0	-49	3.6	5.8	-1.1	NM	
NEXTEL COMMUNICATIONS	421.4	189	748.5	192	-358.7	NM	-745.6	NM	NM	NM	NM	NM	
QWEST COMMUNICATIONS INTERNATIONAL	393.7	72	570.8	89	-876.3	NM	-883.1	NM	NM	NM	-23.8	NM	
RELTEC	278.0	29	518.2	26	14.0	71	17.1	66	5.0	3.8	5.9	61	
SPRINT	3967.2	8	7878.1	9	213.5	-17	430.0	-21	5.4	7.0	9.1	39	
TELEPHONE & DATA SYSTEMS†	451.9	36	844.0	36	-13.7	NM	60.5	268	NM	2.1	1.6	83	
TELEPORT COMMUNICATIONS GROUP	295.3	155	455.4	114	-55.9	NM	-118.1	NM	NM	NM	-24.8	NM	
TELLABS	387.7	32	715.2	32	119.0	103	187.3	54	30.7	20.1	30.7	48	
360 COMMUNICATIONS†	398.6	17	753.4	16	37.1	70	81.2	160	9.3	6.4	22.0	NA	
U. S. CELLULAR†	290.1	33	535.3	33	32.8	3	162.5	224	11.3	14.6	12.4	13	
WORLDCOM	2610.5	45	4960.4	42	227.5	411	-52.9	NM	8.7	2.5	1.2	NM	
(B) TELEPHONE COMPANIES													
GROUP COMPOSITE	**36490.4**	**9**	**71532.7**	**8**	**5858.4**	**117**	**9877.6**	**46**	**16.1**	**8.1**	**28.2**	**23**	
ALLTEL	934.5	14	1781.5	11	196.9	13	320.4	16	21.1	21.3	22.0	15	
AMERITECH	4289.0	8	8422.0	7	1707.0	218	2200.0	105	39.8	13.5	34.0	17	
BELL ATLANTIC	7927.8	3	15578.9	3	1027.2	15	1936.8	21	13.0	11.6	21.2	26	
BELLSOUTH	5664.0	13	11090.0	13	818.0	25	1710.0	27	14.4	13.1	22.9	19	
CINCINNATI BELL	567.2	31	1075.3	25	42.5	-22	65.3	-41	7.5	12.5	23.7	30	
FRONTIER	648.3	10	1280.3	10	47.7	21	81.6	249	7.4	6.7	11.1	52	
GTE	6277.0	10	12162.0	11	673.0	0	815.0	-39	10.7	11.8	30.0	25	
SBC COMMUNICATIONS	6591.0	11	13015.0	9	966.0	NM	1878.0	NM	14.7	NM	31.5	24	
SOUTHERN NEW ENGLAND TELECOMMS.	538.6**	7	1065.7	8	53.1	6	109.5	14	9.9	10.0	30.5	23	
U S WEST	3053.0	8	6062.0	6	327.0	21	761.0	-9	10.7	14.7	246.5	NA	
23 TRANSPORTATION													
INDUSTRY COMPOSITE	**47228.0**	**6**	**91464.7**	**6**	**2795.4**	**1**	**4459.6**	**5**	**5.9**	**6.2**	**16.1**	**15**	
(A) AIRLINES													
GROUP COMPOSITE	**22120.3**	**5**	**42488.6**	**4**	**1676.6**	**15**	**2581.1**	**15**	**7.6**	**6.9**	**30.4**	**10**	
ALASKA AIR GROUP	484.9	11	901.3	11	38.9	87	52.0	244	8.0	4.8	15.3	11	
AMERICA WEST HOLDINGS	533.7**	12	1016.9	8	41.4	80	66.6	80	7.8	4.8	15.1	12	
AMR	5012.0	6	9749.0	7	409.0	35	699.0	54	8.2	6.4	19.2	10	
CONTINENTAL AIRLINES	2036.0	14	3890.0	12	167.0	30	248.0	23	8.2	7.2	44.3	10	
DELTA AIR LINES (6)	3760.0	6	7149.0	3	362.0	20	557.0	14	9.6	8.5	26.9	10	

RPORATE SCOREBOARD

MPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY	PRICE-EARNINGS	12 MONTHS' EARNINGS
	2ND QUARTER 1998 $ MIL.	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6-30	RATIO 7-24	PER SHARE
HWEST AIRLINES	2476.0	–3	4904.5	–1	48.6	–64	119.6	–40	2.0	5.3	NM	7	4.77
HWEST AIRLINES	1078.8	13	2021.5	10	133.4	42	203.4	41	12.4	9.8	18.0	19	1.62
	4442.0	1	8497.0	0	282.0	17	343.0	–1	6.3	5.5	33.6	9	8.58
IRWAYS GROUP	2296.8	4	4359.4	1	194.3	–6	292.5	–18	8.5	9.3	75.1	8	9.37
AILROADS													
UP COMPOSITE	**8624.6**	**–1**	**17056.3**	**–1**	**515.7**	**–42**	**984.9**	**–34**	**6.0**	**10.3**	**8.3**	**23**	**2.05**
INGTON NORTHERN SANTA FE	2219.0	8	4381.0	7	277.0	18	542.0	41	12.5	11.4	14.1	16	6.59
	2642.0	–1	5222.0	0	151.0	–33	242.0	–36	5.7	8.5	11.3	14	2.99
AS CITY SOUTHERN INDUSTRIES	322.6**	28	618.3	26	58.7	85	104.9	74	18.2	12.6	3.9	NM	0.24
OLK SOUTHERN	1079.0**	1	2145.0	2	187.0	1	319.0	3	17.3	17.4	12.5	16	1.85
N PACIFIC	2362.0	–11	4690.0	–11	–158.0	NM	–223.0	NM	NM	8.1	–1.6	NM	–0.58
RANSPORTATION SERVICES													
UP COMPOSITE	**12295.7**	**13**	**23785.8**	**13**	**501.4**	**51**	**728.2**	**97**	**4.1**	**3.1**	**12.8**	**21**	**2.00**
IRNE FREIGHT	764.1	7	1514.3	11	33.8	20	66.2	55	4.4	4.0	20.4	11	2.84
RENT A CAR	575.3	17	1086.7	15	22.4	151	29.8	127	3.9	1.8	7.1	20	1.32
ET GROUP	614.4**	85	1070.3	139	4.8	4	1.3	5	0.8	1.4	7.6	18	1.58
RANSPORTATION	1199.7	20	2289.5	18	41.4	38	60.3	16	3.4	3.0	18.0	19	2.30
7)	4078.0	11	8064.3	9	170.7	93	183.5	NM	4.2	2.4	13.2	19	3.34
(7)	322.6	4	629.8	9	4.8	NM	7.4	NM	1.5	0.0	7.4	19	0.50
	437.6	1	846.5	2	30.8	2	68.2	11	7.0	6.9	–6.4	NM	–1.17
	1048.4	7	1947.2	5	75.1	39	110.5	50	7.2	5.5	19.4	23	2.20
ROUP	283.1	6	538.2	4	2.1	–6	3.7	–12	0.7	0.8	8.1	16	1.24
TON BAX GROUP	432.9**	8	835.3	8	1.0	NM	–2.0	NM	0.2	NM	8.5	10	1.36
SON (C. H.) WORLDWIDE	546.7	21	1014.9	19	11.6	18	20.0	16	2.1	2.2	9.9	74	0.34
SYSTEM	1281.6	4	2527.2	4	45.3	5	82.6	9	3.5	3.5	15.1	13	2.18
Y INDUSTRIES (9)	711.5	27	1421.7	31	57.8	74	96.8	52	8.1	5.9	14.5	14	2.91
RUCKING & SHIPPING													
P COMPOSITE	**4187.5**	**9**	**8133.9**	**9**	**101.8**	**30**	**165.4**	**26**	**2.4**	**2.0**	**12.2**	**14**	**1.53**
NDER & BALDWIN	365.8**	15	657.2	7	19.0	4	32.7	–17	5.2	5.8	10.3	16	1.65
HOLDINGS	280.6	149	534.0	156	7.7	119	8.4	126	2.7	3.1	12.1	20	0.90
SAS BEST	416.9	–2	804.8	–2	7.4	18	11.0	61	1.8	1.5	13.2	9	1.04
LIDATED FREIGHTWAYS	551.8	–5	1097.5	–2	7.5	8	14.5	42	1.4	1.2	9.7	11	1.04
J. B.) TRANSPORT SERVICES	461.0	20	874.5	17	15.6	738	25.1	932	3.4	0.5	10.0	32	0.92
TAR SYSTEM	327.5	5	625.7	6	9.0	67	13.9	53	2.7	1.7	20.8	15	2.45
AY EXPRESS	609.4	0	1231.0	3	5.3	–32	11.9	–10	0.9	1.3	13.7	9	1.74
GHTWAYS	447.0	17	889.4	21	18.0	24	31.8	31	4.0	3.8	15.8	10	2.43
V	727.4	0	1419.9	1	12.3	–11	16.0	–28	1.7	1.9	11.2	11	1.63
ITILITIES													
TRY COMPOSITE	**62644.0**	**23**	**127413.0**	**17**	**2799.1**	**–18**	**7232.3**	**–11**	**4.5**	**6.7**	**9.5**	**20**	**1.69**
ECTRIC, WATER & COGENERATION													
P COMPOSITE	**54472.7**	**25**	**108377.1**	**19**	**2989.4**	**1**	**6684.6**	**–2**	**5.5**	**6.8**	**9.8**	**18**	**1.79**
	565.0	116	1140.0	118	71.0	69	136.0	66	12.6	16.1	16.0	33	1.36
ENY POWER SYSTEM	627.7	16	1273.1	10	56.2	4	136.7	2	9.0	10.0	12.5	12	2.32
N	821.8	4	1522.6	–2	86.8	5	129.9	–1	10.6	10.5	13.0	14	2.81
AN ELECTRIC POWER	2737.9	98	4908.5	71	120.7	–2	273.9	–10	4.4	8.9	12.6	14	3.14
ORE GAS & ELECTRIC	767.6	3	1633.7	0	63.2	322	143.4	65	8.2	2.0	10.9	15	2.13
ERGY	386.4	–9	781.0	–8	34.3	1	57.2	4	8.9	8.0	12.6	14	2.78
RGY	590.6	17	1212.4	16	32.5	5	59.8	2	5.5	6.1	7.0	34	0.84
NA POWER & LIGHT	736.2	11	1488.4	8	65.5	21	152.0	11	8.9	8.2	14.1	15	2.78
L & SOUTH WEST	1344.0	14	2601.0	6	109.0	43	170.0	62	8.1	6.4	11.0	15	1.75
Y	1072.0	24	2403.8	27	–24.6	NM	83.9	–52	NM	6.8	10.6	19	1.72
ERGY	1132.0	11	2506.0	8	70.0	30	163.0	17	6.2	5.3	11.5	16	2.63
IDATED EDISON	1561.0	4	3414.1	0	66.5	40	243.0	13	4.3	3.2	12.5	14	3.08
ON RESOURCES	2066.6	26	4224.7	20	–73.8	NM	74.6	–72	NM	5.4	3.9	37	1.09
	307.5	9	685.4	2	35.4	0	105.9	4	11.5	12.5	13.8	15	1.22
	300.8	6	596.8	2	40.2	–14	85.3	–7	13.4	16.5	12.7	14	2.47
ERGY	1064.0	19	2009.0	14	104.0	18	211.0	30	9.8	9.8	13.0	13	3.21
NERGY	4013.7	29	8128.5	18	279.5	66	607.6	27	7.0	5.4	13.6	20	2.88
INTERNATIONAL	2242.7	3	4152.3	0	153.4	2	307.4	0	6.8	6.9	13.2	15	1.85
EAST	540.4	15	1167.6	10	31.6	20	110.1	2	5.9	5.6	9.8	15	2.67
ERGY	1277.1	115	2458.1	105	69.3	–14	202.3	26	5.4	13.6	8.2	16	1.74
PROGRESS	903.1	13	1690.6	9	78.2	NM	129.1	163	8.7	0.8	8.9	29	1.39
UP	1693.0	7	3031.0	0	180.0	7	292.0	6	10.6	10.6	13.1	17	3.68
AN ELECTRIC INDUSTRIES	362.5	1	738.1	3	23.9	12	47.6	12	6.6	5.9	11.2	13	2.88
N INDUSTRIES	2738.7	157	5375.4	177	44.3	–64	13.1	–93	1.6	11.4	5.3	31	0.91
A	547.3	1	1122.7	1	–42.0	NM	–14.1	NM	NM	6.8	0.4	NM	0.07
IERGY	441.1	14	891.5	10	14.4	–57	62.2	–25	3.3	8.7	10.3	18	1.39
RICAN ENERGY HOLDINGS	393.4	2	865.0	–10	22.2	–12	62.2	0	5.7	6.6	10.4	14	1.47
NTURY ENERGIES	859.6	11	1799.1	8	59.5	61	148.6	26	6.9	4.8	12.2	16	2.74
GLAND ELECTRIC SYSTEM	572.0	–1	1191.6	–2	35.0	3	92.4	–5	6.1	5.9	12.4	12	3.37
MOHAWK POWER	910.9	–4	2009.3	–5	–141.4	NM	–121.0	NM	NM	4.3	–4.3	NM	–0.82
INDUSTRIES	652.4	25	1431.8	21	31.6	4	94.5	–9	4.8	5.8	14.2	19	1.46

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY	PRICE-EARNINGS	MO EAR
	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 $ MIL	CHANGE FROM 1997 %	6 MONTHS 1998 $ MIL	CHANGE FROM 1997 %	2ND QUARTER 1998 %	2ND QUARTER 1997 %	12 MONTHS ENDING 6-30	RATIO 7-24	$
NORTHEAST UTILITIES	874.8	–3	1833.7	–2	13.6	NM	43.0	NM	1.6	NM	–3.6	NM	–0
NORTHERN STATES POWER	638.6	7	1340.0	0	35.0	92	92.1	10	5.5	3.1	9.9	17	1
OGE ENERGY	449.1	35	755.0	21	47.9	54	47.5	54	10.7	9.3	15.4	14	1
PACIFICORP	1923.4	58	3999.1	77	40.8	–46	25.7	–86	2.1	6.2	1.3	NM	C
PECO ENERGY	1208.0	17	2381.1	8	152.0	24	265.6	13	12.6	11.9	12.7	19	1
PG&E	4787.0	55	9140.0	42	174.0	–14	313.0	–18	3.6	6.5	8.5	19	1
PINNACLE WEST CAPITAL	470.6	–4	885.2	0	51.4	–27	85.4	–14	10.9	14.4	11.0	16	2
POTOMAC ELECTRIC POWER	528.5	17	908.9	8	66.0	32	73.5	1	12.5	11.1	9.1	18	1
PUBLIC SERVICE CO. OF NEW MEXICO	309.0	29	638.7	19	14.8	–5	36.0	–11	4.8	6.5	9.2	12	1
PUBLIC SERVICE ENTERPRISE GROUP	1557.0	18	3458.0	13	125.0	28	319.0	32	8.0	7.4	12.2	12	2
PUGET SOUND ENERGY	365.5	4	887.6	9	19.5	–42	85.5	30	5.3	9.5	9.5	17	1
SCANA	388.0	17	794.0	11	44.0	37	110.0	21	11.3	9.7	13.1	13	2
SOUTHERN	2913.3	7	5427.0	2	276.9	21	525.3	21	9.5	8.4	11.1	17	1
TECO ENERGY	490.6	6	958.4	5	57.9	15	88.7	–12	11.8	11.0	13.6	18	1
UNICOM	1779.0	5	3491.2	4	94.5	361	163.1	61	5.3	1.2	–3.1	NM	–(
WASHINGTON WATER POWER	633.0	168	1204.7	132	15.6	–68	47.9	–39	2.5	20.5	10.6	15	
WESTERN RESOURCES	463.3	2	845.6	–22	34.8	43	65.3	0	7.5	5.4	24.2	5	
WISCONSIN ENERGY	465.0	15	975.6	7	29.2	NM	78.5	124	6.3	NM	5.6	31	
(B) GAS, OIL & TRANSMISSION GROUP COMPOSITE	**8171.3**	**14**	**19036.0**	**5**	**–190.3**	**NM**	**547.7**	**–59**	**NM**	**6.0**	**6.7**	**37**	
COLUMBIA GAS SYSTEM	1322.4	64	3164.1	36	22.8	–35	170.3	–14	1.7	4.3	12.7	19	
CONSOLIDATED NATURAL GAS	530.4	–16	1529.6	–14	46.8	–2	184.8	–16	8.8	7.6	11.6	18	
EL PASO NATURAL GAS	1296.0	32	2915.0	4	61.0	22	125.0	21	4.7	5.1	10.3	20	
MCN ENERGY GROUP	406.2	5	1107.7	–6	–210.1	NM	–129.6	NM	NM	2.3	–6.4	NM	
NICOR	271.3	–11	833.6	–31	28.5	–1	64.7	–7	10.5	9.5	16.3	15	
ONEOK (4)	444.0	92	1166.1	65	26.9	96	100.8	94	6.1	5.9	7.6	16	
SEMPRA ENERGY	1335.0	18	2685.0	10	31.0	–72	118.0	–44	2.3	9.9	10.2	NA	
SONAT	925.2	8	2034.4	3	–258.0	NM	–220.0	NM	NM	2.0	–9.0	NM	
WILLIAMS	1640.7	–12	3600.5	–5	60.7	–49	133.6	–55	3.7	6.3	6.2	53	

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

A

Axe 10c
Abbott Laboratories 12b
AEM Industries 21e
ACNielsen 21e
ADC Telecomm. 22a
Administaff 21e
Advanced Micro 9d
Aeroquip-Vickers 15a
AES 24a
AFLAC 17b
AGCO 15c
Agricultural International 10b
Air Products 17c
Air Products & Chemicals 4
Airborne Freight 23c
AirTouch Communications 22a
AK Steel Holding 16b
Alaska Air Group 23a
Albany-Cowper 6d
Albertson's 10c
Alcoa 16a
Alexander & Baldwin 23d
Allegheny Power 24a
Allegheny Teledyne 5
Allegiance 21b
Allergan 12b
Allied Holdings 23d
Allied Waste Inds 21c
AlliedSignal 5
Allmerica 17b
Alltel 22b
Alza Corp. 9c
Alumax 16a
Amerada Hess 11a
Ameren 24a
America West Holdings 23a
American Electric 24a
American Express 17a
American General 17b
American Greetings 14d
American Home 12b
American Intl. Group 17b
American National 17b
American Standard 13a
American Stores 10c
AmeriSource Health 12a
Ameritech 22b
Ames Dept. Stores 8
Amgen 12b
Amkor Technology 21e
Amoco 11a
AMP 9d
AMR 23a
Analog Devices 9d
Andersons 10a
Anheuser-Busch 6c
Anixter International 5
Apple Computer 18b
Applied Materials 15c
Arch Coal 11a
Archer Daniels 10b
Arco Chemical 4
Arkansas Best 23d
Armco 16b
Armstrong World 6b
Arrow Electronics 21b
Arvin Industries 2b
Asarco 16c
Ascend Communications 18c
Ashland 11a
Associated Banc-Corp 3a
Associates First Capital 17a
AT&T 22a
Atlantic Richfield 11a
Atmel 9d
AutoZone 8
Avery Dennison 7b
Avis Rent A Car 23c
Avnet 21b
Avon Products 6d
AVX 9d

B

B/E Aerospace 11b
Ball 7a
Baltimore G&E 24a
Banc One 3b
Bank of New York 3a
BankAmerica 3d
BankBoston 3a
Bankers Trust 3a
Banta 21d
Bard (C.R.) 12d
Barnes & Noble 8
Bausch & Lomb 12d
Baxter International 12d
Bay Networks 18c
BB&T 3c
Bear Stearns 17a
BEC Energy 24a
Beckman Coulter 9c
Becton, Dickinson 12d
Bell Atlantic 22b
BellSouth 22b
Belo (A.H.) 20b
Bemis 7b
Bergen Brunswig 12a
Best Buy 6b
Bestfoods 10b
Bethlehem Steel 16b
BetzDearborn 4
Beverly Enterprises 12c
Big Flower Holdings 21d
Bindley Western Inds 12a
BJ Services 11b
BJ's Wholesale Club 8
Black & Decker 15b
Block (H&R) 17a
Boeing 1
Boise Cascade 19b
Boise Cascade Office Prods 21b
Borders Group 8
Borg-Warner Automotive 2b
Boston Scientific 12d
Bowater 19b
Bradlees 8
Brightpoint 21b
Brinker International 14a
Bristol-Myers Squibb 12b
Brown Group 6a
Brown-Forman 6c
Bruno's 10c
Brunswick 14d
Brylane 8
Budget Group 23c
Burlington Industries 15d
Burlington Northern Santa Fe 23b
Burlington Resources 11a

C

Cabletron Systems 18c
Cabot 4
Cadence Design Systems 18c
Caldor 8
CalEnergy 24a
Campbell Soup 10b
Canandaigua Wine 6c
Capital One Financial 17a
Cardinal Health 12a
Carlisle 15a
CarMax Group 21e
Carnival 14d
Carolina Power 24a
Carpenter Tech 16b
Case 15c
Casey's General Stores 21e
Caterpillar 15c
CBI 21e
CDW Computer Centers 8
CellStar 21b
Centex 13b
Central & South West 24a
Century Telephone 22a
Ceridian 18c
Champion Enterprises 13b
Champion Intl. 19b
Charter One Financial 17c
Chase Manhattan 3a
Chevron 11a
Chicago Title 17a
Chiquita Brands Intl 10b
Chiron 12b
Chrysler 2a
Cigna 17b
Cincinnati Bell 22b
Cincinnati Financial 17b
Cincinnati Milacron 15b
CINergy 24a
Cintas 21e
Circuit City Group 6b
Circus Circus 14b
Cisco Systems 18c
CIT Group 17a
Citicorp 3a
CKE Restaurants 14a
Clear Channel Communs. 20a
Clorox 6d
CMS Energy 24a
CNF Transportation 23c
Coastal 11a
Coca-Cola 6c
Coca-Cola Enterprises 6c
Cole National 8
Colgate-Palmolive 6d
Collins & Aikman 15d
Coltec Industries 15a
Columbia Gas 24b
Columbia/HCA Healthcare 12c
Comdisco 18c
Comerica 3b
Commerce Bancshares 3b
Commercial Metals 16b
Compaq Computer 18b
CompuCom Systems 18a
Computer Associates 18c
Computer Sciences 18c
Compuware 18c
ConAgra 10b
Conseco 17b
Consolidated Edison 24a
Cons. Freightways 23d
Cons. Natural Gas 24b
Consolidated Papers 19b
Consolidated Stores 8
Continental Airlines 23a
Cooper Cameron 11b
Cooper Industries 9a
Cooper Tire & Rubber 2c
Coors (Adolph) 6c
Corn Products Intl 10b
Corning 15a
Costco 8
Countrywide Credit 17a
Coventry Health Care 12c
Cox Communications 20a
Cracker Barrel 14a
Crane 15a
Crestar Financial 3c
Crompton & Knowles 4
Crown Cork & Seal 7a
CSX 23b
Cummins Engine 15c
CVS 12a
Cyprus Amax Minerals 16c
Cytec Industries 4

D

Dana 2b
Danaher 15b
Darden Restaurants 14a
Data General 18b
Dayton Hudson 8
Dean Foods 10b
Deere 15c
Dell Computer 18b
Delta Air Lines 23a
Deluxe 18a
Detroit Diesel 2b
Dexter 15d
Dial 6d
Diamond Offshore 11b
Diebold 18a
Dillard's 8
Dime Bancorp 17c
Disney (Walt) 14b
Dole Food 10b
Dollar General 8
Dominick's Supermarkets 10c
Dominion Resources 24a
Donaldson, Lufkin & Jenrette 17a
Donnelley (R.R.) 21d
Dover 15c
Dow Chemical 4
Dow Jones 20b
DPL 24a
DQE 24a
Dresser Industries 11b
DSC Communs. 22a
DTE Energy 24a
Duke Energy 24a
Dun & Bradstreet 17a
DuPont 4
Dynegy 21b

E

Earthgrains 10b
Eastman Chemical 4
Eastman Kodak 14d
Eaton 9a
Echlin 2b
Ecolab 6d
Edison International 24
Edwards (A.G.) 17a
EG&G 5
El Paso Natural Gas 24
Electronic Data Systems
EMC 18b
Energy East 24a
Engelhard 16c
Enron 21b
Equifax 17a
Essex Intl. 16c
Everest Reinsurance 17
EVI Weatherford 11b
Excel Communications
Exide 15a
Express Scripts 12c
Exxon 11a

F

Family Dollar Stores 8
Fannie Mae 17a
FDX 23c
Federal-Mogul 2b
Federated Dept. Stores
Ferro 4
Fidelity National Finl.
Fifth Third Bancorp 3b
Fina 11a
Fingerhut 8
Finova Group 17a
First American 3c
First American Finl. 17

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

ago NBD 3b
a 18c
yland Bancorp 3a
rity 3d
nessee Natl 3c
on 3c
b
gy 24a
c
ancial Group 3a
) Ents 13b
10a
ogress 24a
15c
1
10c
r 14a
1
r 2a
s 19b
rands 15a
eeler 21a
24a
esources 17a
ac 17a
IcMoRan C&G 16c
2b
e Loom 6a
) 4
Brands 6b
rd 15d
18c
0b
000 18b
b
bie 16c
namics 1
ctric 5
trument 9b
ts 10b
tors 2a
trition 10c
17b
nal 9a
rts 21b
cific Group 19a
10c
tMail 8
ne 11b
e Bancorp 17c
17c
F.) 1
e & Rubber 2c
4
W.) 21b
0c
Chemical 4
omotive 21e
Aerospace 1
1b
21e
4
rothers 10c
eral 5
scn 14d
r 15c
ertainment 14b
ncial Services 17b
17b
ctric 24a
erz Intl 2b
ic
ement Assocs. 12c
i2c
6b
0b

Heller Financial 17a
Hercules 4
Hershey Foods 10b
Hertz 23c
Hewlett Packard 18b
Hexcel 15a
Hibernia 3c
Hillenbrand 15a
Hills Stores 8
Hilton Hotels 14c
Home Depot 8
HomeBase 8
HON Industries 18a
Honeywell 9c
Hormel Foods 10b
Horton (D.R.) 13b
Host Marriott 14c
Host Marriott Services 14a
Household Intl 17a
Houston Industries 24a
Hub Group 23c
Hubbell 9a
Hughes Electronics 9b
Hughes Supply 21b
Hunt (J.B.) 23d
Huntington Bancshares 3b

I

IBM 18b
IBP 10b
ICF Kaiser Intl. 21c
Illinois Tool Works 15a
Illinova 24a
IMC Global 4
InaCom 18c
Ingersoll-Rand 15c
Ingles Markets 10c
Ingram Micro 18c
Inland Steel 16b
Integrated Health Svcs. 12c
Intel 9d
Interface 15d
Interim Services 21e
International Flavors 4
Intl Home Foods 10b
Intl. Multifoods 10a
International Paper 19b
Interpublic Group 21d
Intimate Brands 8
Iomega 18b
ITT Industries 5

J

Jabil Circuit 9d
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EDITED BY AMY DUNKIN

INVESTING IS CHILD'S PLAY ON THE WEB

In conservative families like mine, there were two topics parents didn't discuss in front of the children—and the other one was money. Needless to say, my money skills left something to be desired: I routinely blew most of my allowance and yard-mowing money as soon as I got my hands on it. But judging from recent surveys, I was a financial whiz compared with the current generation: In a 1997 study of how well teenagers grasped simple money concepts, only 5% of the 12th graders polled scored higher than a C. And less than half knew that if workers' wages doubled, their income would double as well.

If you would like your children to grow up savvy about saving and investing, a number of Web sites can help (table). Granted, even the best sites lack the depth of a good book, and are no substitute for hands-on parental guidance. But given the appeal the Internet holds for most kids, these sites can help teach that saving and investing can be fun—and not just a grim exercise in deferred gratification.

COLD LEMONADE. If your child is still young, a couple of simple sites are designed for short attention spans. First Technology, a credit union in Oregon, offers the Kid's Club Savings Calculator, an applet that asks your child to choose a goal—say, a video game or bicycle—and then helps calculate how much to set aside each week to achieve the needed savings. At Bonus.com, you'll find links to games that help kids grasp fundamental ideas about money: They can operate a virtual lemonade stand, provide the correct change to a soda jerk (played by Honest Abe), and—what were they thinking?—play a virtual slot machine. These games aren't listed on the main Bonus.com menu, but clicking on "search," then typing in "money" will get you there. One warning: Given the lavish use of Java by Bonus and several other of these sites, don't try gaining access with anything less than a Pentium-powered PC, and even then be prepared for a few glitches.

ONLINE

If your budding Warren Buffett is bored by these sites, click over to Liberty Financial Co.'s Young Investor, which is aimed at teens. First, pick one of six tour guides—ranging from robotron Blad to superhero Bengod—who will walk you through the site's many features, including such exercises as a crossword, a rebus, and the Money-Tron memory game. Liberty also awards gift checks and prizes such as a digital camera to kids who post savings tips and answer its "Measure Up" survey. Parents may find the queries too personal: Questions include how much allowance kids get, plus whether they have received stock, savings or other finance-relate from relatives, and if s gave it. But Liberty the information isn't and is only recorded t ternal marketing pur and to identify prizew

It's never too late (ly) to teach your ki ABCs of investing. One best primers is at In for Kids, a surprising ished site, given its o a science project fo California grade-sch The site offers an in tion to investing, as w special section explain market math for con commissions and dete the "net asset value" tual funds. The sit sports its own stock a tual-fund contests, c with current standing 500 best returns—b no prize other than spect of your peers.

However, A. G. E a St. Louis brokerage agedwards.com/bm shtml), awards T-shi week to the top fini

Money Lessons For Kids

BONUS.COM bonus.com
Younger kids can test their entrepreneurial skills by operating a lemonade stand or other business.

GAZILLIONAIRE www.gazillionaire.com/gaz.html
Lets teens run a trading company from space—and learn such concepts as supply and demand.

INVESTING FOR KIDS tqd.advanced.org/3096/index.htm
Stock market simulation that includes one of the best stock investing primers.

KID'S CLUB SAVINGS CALCULATOR
www.1sttech.com/kidsclb/kidscalc.html
Choose a savings goal, such as a video game or a bicycle, and figure out what to set aside.

KIDS' MONEY pages.prodigy.com/kidsmoney
For Mom and Dad only: Links to money expert articles, plus regular parents polls.

MAINXCHANGE www.mainxchange.com
This stock market game lets young people invest 100,000 virtual dollars and win prizes.

THE YOUNG INVESTOR www.younginvestor.com
Investing primers, trivia, memory games; but the Measure Up survey asks too many personal questions.

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ne, based on the pre-
nonth's results. And
nXchange, kids can
their investment
s into prizes from
's ranging from Com-
Hasbro. Players are
100,000 "virtual dol-
nd access to stock
charts, news, and
tools. MainXchange
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games as Zapital-
here you can down-
shareware version of
ar Gazillionaire game.
between SimCity and
ly, Gazillionaire lets
run an extraterres-
trial trading company—and in the process, learn about supply and demand, compound interest, and profit margins. A warning: Despite LavaMind's efforts to spiff up the program with arcade-like sound and graphics and to provide on-screen tutorials, you'll still spend a lot of time poring over pricing charts.

If you still feel you need pointers on teaching money skills—or would simply like to compare notes with other parents—head over to Prodigy's Kids' Money site. Here you'll find links to dozens of articles aimed at parents by experts from Dr. Spock to Dr. Tightwad, mostly addressing the issue of allowances—including poll results about allowances. (74% of participants give a weekly allowance, averaging $3.50 for 6-year-olds and $35 for 18-year-olds. But 77% of parents tie allowances to chores, according to another poll.) You can also enter pictures of your children with their favorite savings vehicles in the "That's My Piggy" photo contest.

At the "Save Lab" page in Merrill Lynch's Family Saving Center (www.plan.ml.com/family/index.html), you can order several free print publications, including the *Teach Your Children to Save* activity workbook and the *Savin' Dave and the Compounders* comic book. (Doing so will presumably guarantee you a call from a Merrill Lynch broker.) Bookmark this site for future use, because each spring Merrill Lynch sponsors a savings poster, essay, and video contest, with winners receiving up to $1,000 in savings bonds.

TEEN JOBS. When teens get summer jobs, they'll be flush with cash—and easy prey for kid-oriented marketers. To help them become savvy shoppers, point them toward the Consumer Education for Teens site (www.wa.gov/ago/youth) designed by high school students in Washington State. You'll get the low-down on everything from fly-by-night modeling agencies to those "12-CDs-for-a-penny" music clubs.

The learning doesn't have to stop when you turn off your PC. Merrill Lynch offers an exhaustive list of savings books for kids, some of which you can probably find at your library. And at Software.net (www.software.net), you will find money-related kids' software programs, ranging from Math of Money to Money Town. After all, money is something every parent should talk about in front of the kids. *Dean Foust*

WHAT WORK-AT-HOME PARENTS CAN SNAG ON THE NET

Four years ago, while pregnant with her second child, software engineer Cheryl Demas did something that surprised even herself: She quit her job to stay at home. But she didn't want to stop working. While rooting around the Internet for job possibilities, says Demas, "I discovered there were thousands of women who would like to be at home with their kids—and they're intelligent, well-educated women." She had an idea: Why not create a Web site that would offer resources and support for work-at-home moms?

Today, Demas' site generates half a million page views a month through its business directory, book list, and classified ads. A popular feature is Demas' monthly humor column, which recently described her lifelong quest to be No. 1 in line at Disney World. And the site supplies answers to frequently asked questions such as "How can I convince my boss he should let me work from home after my baby is born?" Answer: "Show him how he benefits, too."

Demas' site is just one of many Web resources for working parents as they alternately glide and stumble through their frenetic

lives (table). Think about it: Using the Web, you can nab a freelance job, track down some advice about the nanny tax, and solicit tips on parenting. You can do your banking, unload a stock, or window-shop online. And, if you're feeling lonely in your home office, or guilty about the time you spend on business trips, you can click on to sites that let you chat with like-minded souls.

"A lot of the best sites for working parents don't even have the word 'parents' in their title. They're just the best of their genre for time management, child management, and cooking for your family," says Melissa Wolf, author of *Parenting Online: The Best of the Net for Moms and Dads* (Equinox Press, $16.95). Once you locate one site, it invariably provides links to others: Work At Home Moms, for example, provides a jump-off to Home-Based Working Moms (www.hbwm.com), Entrepreneurial Parent and Bizy Moms (www.bizymoms.com).

SYMPATHETIC EAR. The best part is the interaction the Web allows. "Parents on the job are often isolated in their roles. There's no one they can talk to that long," says Katharine de Baun, co-founder of Moms Online (www.momsonline.com or America Online, keyword: MO). Like many generic parenting sites, this one offers message boards targeted to people in the work world. At its Professional Moms board, for example, a working mother described feeling overwhelmed. "How do women work full-time, take care of the kids, take care of the house, feed and walk the dog, shop for groceries, find a decent day-care center, and pay the bills?" she wailed. Sympathetic cohorts E-mailed in their tips: everything from "buy cheese in five-pound bags" to "put more hours in the day."

While some people use these Web sites merely to vent their frustrations, others seek concrete help—such as job leads. At Entrepreneurial Parent, "Katherine" was looking for a way to make money at home using her word-processing skills. "Where do I begin?" her E-mail message asked. Another E-mailer referred her to a placement service for at-home computer workers: www.workingsol.com.

ONLINE

The Web is also a te source of advice on rearing. Susan Weave rector of the megasite ent Soup, often uses me boards for problem sol When her 10-year-old b at doing homework, We visited a board for pa of school-age children. " hours, I had six beaut written, informative, smart responses," she One tip—giving her so quent play breaks—di trick.

HOMEWORK HELP. For ing parents, who al seemed to be presse time, the Web offers m conveniences. You can someone a bouquet of ers (www. 1800flowers buy books (www.am com), pick out toys for children (etoys.com) buy school clothes (landsend.com). If you busy to prepare dinn food-shop, you can take-out meals th www.cybermeals.con groceries from Pe Website.

And if your kids a hand with their work while you're at the office, you ca them to help sites Pinchbeck's Hom Helper, hosted by year-old wunderkin Pennsylvania, su links to newspape cyclopedias, and oth erence sources. AOL bers can take adv of the Ask a Teach vice (keyword: work). And anyon has a modem will to call up ww workheaven.com.

Of course, thes represent only a f of the parenting you'll find on the from 24-hour pedia vice to children's tainment. For working parents connection to othe make their jobs and outside the lot easier. *Joa*

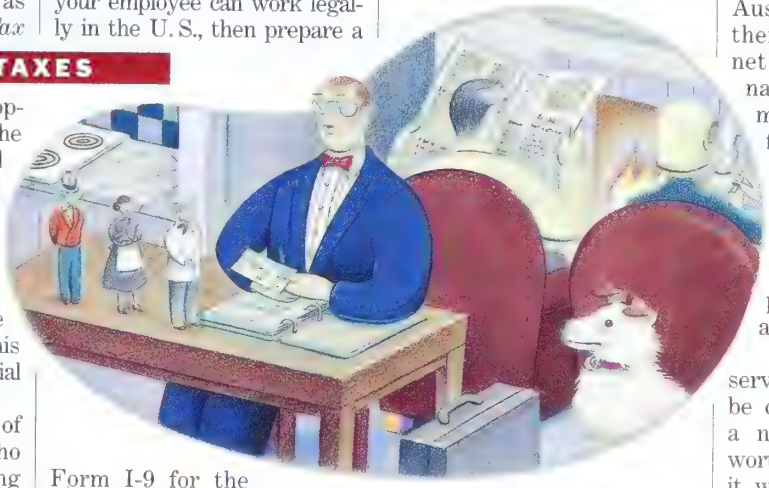
Connections For Working Parents

WEB SITE	COMMENTS
B.J. PINCHBECK'S HOMEWORK HELPER tristate.pgh.net/pinch13	Links to virtual dictionaries, online newspapers, and school-related sites
ENTREPRENEURIAL PARENT en-parent.com	Resource for home-based entrepreneurs; expert advice, forums, E-mail newsletter
FATHERS' RESOURCE CENTER www.visi.com/~frc	Minnesota organization's site links to dad sites re: fathers-to-be, single parenting, divorce
NANNYTAX www.nannytax.com	Overview of federal tax laws for domestic employers as well as state tax info
NET NANNY www.netnanny.com	Internet filtering software to protect kids, plus news and legal updates
PARENT SOUP www.parentsoup.com	Advice about each stage of childhood; chats, message boards, experts to query
PEAPOD INTERNET DRUG & GROCERY www.peapod.com	Membership organization (not available all places) lets you shop, order online
WORK AT HOME MOMS www.wahm.com	Ideas and support for women starting home-based businesses
YOUR GROSS AND COOL BODY www.nj.com/yucky/body	From poop to gas to earwax, everything your 10-year-old has been dying to ask

)W TO AVOID YOUR RY OWN NANNYGATE

Flickinger was y three months ast fall when his nts sat staring yed at Internal Revervice Publication 926, ge recipe for parental otherwise known as *old Employer's Tax* With mom et return- her business-develop- ost at a law firm, she husband, Brad, had e out how to pay n the nanny the (Va.) family would eed. "We flipped the book and said, ow what? Someone already figured this ys Brad, a commercial ate manager. Flickingers are one of ds of couples who ncluded that paying fessional help beats g hours mastering the s that apply to anyo employs a nanny, aide, cook, or other Generally, if you pay old employee $1,100 this year, you're o cough up Social Se- nd Medicare taxes, e and federal unem- insurance premiums. it that simple, few would seek aid from a pro. But there are exclusions, and exceptions to the exclusions, detailed in Publication 926 (800 829-3676; www.irs.ustreas.gov). Then there are the forms to fill out, not all of them tax-related. For instance, you have to verify your employee can work legally in the U.S., then prepare a Form I-9 for the Immigration & Naturalization Service (800 870-3676; table).

TAXES



Worst of all, the rules keep changing. Now, all employers must report information on new employees to state agencies, a result of 1996 federal welfare reform that aims to cut fraud and ease enforcement of court-ordered child support. And this year, the feds no longer let you settle on your return whatever household payroll-tax liabilities you run up, a change from rules that have held since 1995. Now you have to pay as you go, by filing quarterly estimated taxes on Form 1040-ES or by asking your employer to withhold a greater amount from your paycheck. "You have to pay at least what you paid last year or be within 10% of what you'll owe," says Guy Maddalone, president of GTM Associates, a payroll-services firm in Albany, N.Y. Otherwise, you'll owe an underpayment penalty.

Because the laws are so complex, you don't have to be a militia member to want to ignore the taxes. Through the end of April, the IRS counted 300,000 taxpayers using Schedule H, the form for figuring household employment taxes. That's up 50% from April '97 but is less than 0.3% of all returns filed—and less than half the estimated number of nannies, not to mention other workers.

By ignoring the taxman, of course, you risk a guilty conscience if not the IRS's wrath. Kathleen Webb, CEO of Sterling (Va.)-based Home/Work Solutions, reports a steady business in preparing amended returns, often for political appointees wishing to avoid the fate of former Attorney General nominee Zoe Baird.

THE WORKS. Neither wanting to master the system nor run afoul of the law, the Flickingers chose Breedlove & Associates' service (table). The Austin (Tex.) firm helped them determine how much net salary to offer Ryan's nanny so they didn't pay more than they could afford after payroll taxes. Breedlove, like similar services, files withholding forms, secures employer ID numbers, prints pay stubs, and prepares quarterly and annual tax filings.

If you're interested in a service, check whether you'll be charged extra for adding a new employee. It's also worth seeing how much more it will cost to have the service deposit your employee's pay directly in a bank account.

An alternative is to add these tax duties to your accountant's chores. Or there's software. *NannyPay* from Essentia Software (888 999-1722) costs $29.95 by mail or $24.95 off the Internet (www.essentia-soft.com). But that still requires brainpower, which many aren't willing to give to nanny taxes. *Robert Barker*

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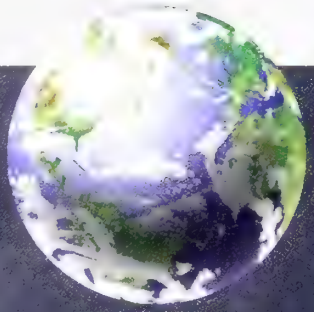
- Obtaining a federal employer identification number (EIN) from the IRS
- Completing federal Form I-9 to verify that your employee can work legally
- Contacting your state's unemployment tax agency to get a state EIN
- Getting a second EIN from your state if you plan to withhold income taxes along with mandatory Social Security, Medicare, and unemployment taxes
- Making a New Hire Report to your state

DATA: INTERNAL REVENUE SERVICE, BUSINESS WEEK

Where To Get Help

FIRM/PHONE/WEB SITE	FEE
BREEDLOVE & ASSOCIATES 800 723-9961 www.breedloveinc.com	$50 initially, then $325 a year
GTM ASSOCIATES 800 929-9213 www.gtmassoc.com	$75, then $336 a year
HOME/WORK SOLUTIONS 800 626-4829 www.4nannytaxes.com	$100, then $315 a year
NANNYTAX 888 626-6982 www.nannytax.com	$85, then $340 annually

The New Era of Content
and Communications



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A Conference for Senior Executives i

Convergence is back. With a vengeance. And what once was a question of bandwidth is now more a matter of content. Of programmability. Availability. And choice.

With a public voracious for entertainment and information, what are the opportunities? The limitations? Who will benefit most? Cable companies? Internet providers? Movie studios?

Who will own what? And will the government intervene? Will governing bodies react with a policy of laissez-faire? Or a firmer hand, encouraging markets or restricting them?

Come find out who is best prepared. Who isn't.
Who will prosper most. And who has the most to lose.

On hand will be corporate leaders in media, entertainment and communications. To speak their minds, share points of view, and answer these questions and yours at the Business Week 1998 Global Convergence Summit.

Reserve your seat now. It promises to be electrifying.

October 28, 1998
The Waldorf-Astoria Hotel
New York City

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President
Tele-Communications, Inc. (TCI)

SHELLY LAZARUS
Chairman & CEO
Ogilvy & Mather Worldwide

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Chairman & CEO
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ertainment, Media and Communications Industries

STED BY: **Sir DAVID FROST**, Award-Winning Journalist

KEVIN K. CARTON, Global Entertainment and Media Practice Leader, PricewaterhouseCoopers

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RLMAN, Co-founder & President, *WebTV Networks, Inc.*

N TRUJILLO, President & CEO, *U S WEST*

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August 17, 1998

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2 America Isuzu Motors Inc.

3 Cessna Aircraft Company

4 Hilton HHonors

5 Fujitsu PC

6 Minolta

7 Mississippi Department of Economic & Community Development

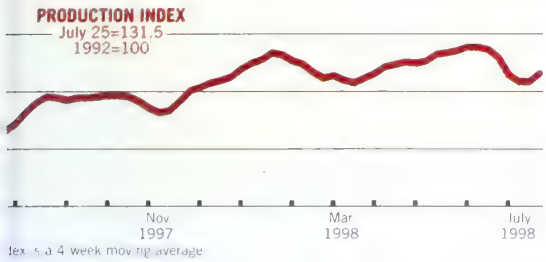
8 Rockwell Corporation

9 TIBCO

siness Week Index

UCTION INDEX

ıge from last week 0.5%
ıge from last year 3.9%



dex, 3-a 4 week moving average

uction index advanced in the week ended July 25. The unaveraged s up 1%, to 133.6 from 132.3 in the previous week. Auto, truck, and duction rebounded strongly as auto workers returned after the industry's ummer shutdown. Output of electricity was up 3.1% to an all-time l-freight traffic plummeted 4.6%, with automotive traffic off 21.1% ıllic ore off 25.5%. Oil, coal, and lumber production were also down.

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NG INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
RICES (7/31) S&P 500	1120.67	1140.80	18.3
ATE BOND YIELD, Aaa (7/31)	6.59%	6.56%	-6.0
UPPLY, M2 (7/20) billions	$4,208.6	$4,201.6r	7.5
LAIMS, UNEMPLOYMENT (7/25) thous	304	317r	10.1
E APPLICATIONS, PURCHASE (7/31)	257.2	252.4	21.5
E APPLICATIONS, REFINANCE (7/31)	1,278.8	1,320.2	85.5

Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage ssn. (Index: March 16, 1990=100)

EST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
FUNDS (8/4)	5.54%	5.50%	5.48%
IAL PAPER (8/4) 3-month	5.51	5.50	5.56
ATES OF DEPOSIT (8/5) 3-month	5.59	5.60	5.61
RTGAGE (7/31) 30-year	7.05	7.04	7.50
BLE MORTGAGE (7/31) one-year	5.79	5.78	5.67
31)	8.50	8.50	8.50

Federal Reserve, HSH Associates, Bloomberg Financial Markets

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (8/1) thous. of net tons	2,066	2,013#	7.0
AUTOS (8/1) units	80,643	71,744r#	30.1
TRUCKS (8/1) units	90,148	75,009r#	-17.5
ELECTRIC POWER (8/1) millions of kilowatt-hrs.	76,391	79,676#	1.9
CRUDE-OIL REFINING (8/1) thous. of bbl./day	15,431	15,518#	2.9
COAL (7/25) thous. of net tons	21,373#	21,099	3.1
LUMBER (7/25) millions of ft.	508.0#	498.2	0.6
RAIL FREIGHT (7/25) billions of ton-miles	25.8#	25.7	0.4

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPA1, SFPA2, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (8/5) $/troy oz.	287.900	290.750	-9.8
STEEL SCRAP (8/4) #1 heavy, $/ton	130.50	130.50	-9.1
COPPER (7/31) ¢/lb.	81.4	81.6	-28.3
ALUMINUM (7/31) ¢/lb.	66.3	65.5	-18.1
COTTON (8/1) strict low middling 1-1/16 in., ¢/lb	71.01	73.78	-2.0
OIL (8/4) $/bbl.	13.52	14.16	-34.2
CRB FOODSTUFFS (8/4) 1967=100	224.04	226.88	-6.1
CRB RAW INDUSTRIALS (8/4) 1967=100	294.44	295.77	-13.7

Sources: London Wednesday final setting, Chicago market, *Metals Week*, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (8/5)	144.06	142.37	118.83
GERMAN MARK (8/5)	1.77	1.77	1.87
BRITISH POUND (8/5)	1.64	1.65	1.60
FRENCH FRANC (8/5)	5.94	5.94	6.33
ITALIAN LIRA (8/5)	1747.0	1747.0	1835.5
CANADIAN DOLLAR (8/5)	1.51	1.50	1.38
MEXICAN PESO (8/5)	9.010	8.904	7.779
TRADE-WEIGHTED DOLLAR INDEX (8/5)	114.8	114.2	107.7

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan.

in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

E WEEK AHEAD

IVITY AND COSTS

Aug. 11, 10 a.m.EDT ▶ Nonfarm may have eked out a small, 0.5% e gain in output per hour worked in l quarter. That suggests that unit probably grew at a 2.5% pace. er productivity was reported to at a 1.1% annual rate, while unit nced by 3.1%. This upcoming vever, will contain the Labor Dept.'s the productivity data of the past , so those first-quarter growth rates change.

LES

Aug. 13, 8:30 a.m.EDT ▶ Retail bly fell by 0.1% in July, says the median forecast of economists surveyed by Standard & Poor's MMS, a unit of The McGraw-Hill Companies. Excluding vehicle buying, store receipts probably rose by 0.3%. In June, total sales and receipts excluding cars each rose just 0.1%.

BUSINESS INVENTORIES

Friday, Aug. 14, 8:30 a.m.EDT ▶ Inventories held by manufacturers, wholesalers, and retailers were probably unchanged in June, after dropping 0.1% in May.

PRODUCER PRICE INDEX

Friday, Aug. 14, 8:30 a.m.EDT ▶ Producer prices of finished goods probably edged up just 0.1% in July, after slipping the same amount in June. Excluding food and energy costs, prices also likely increased 0.1%, on top of a 0.2% increase in June.

INDUSTRIAL PRODUCTION

Friday, Aug. 14, 9:15 a.m.EDT ▶ The S&P MMS forecast calls for a 0.3% drop in industrial output in July, on top of a 0.6% drop in June. That weakness mostly reflects the loss in vehicle production caused by the General Motors Corp. strike, while the falloff in exports is hurting production outside of the auto industry. However, the heat wave across most of the U.S. likely boosted utility output. The average operating rate for all industry probably slipped to 81.1% in July, from 81.6% in June.

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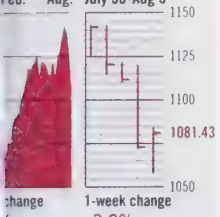
vestment Figures of the Week

KS

500
Feb. Aug. July 30-Aug 5



change 1-week change
% –3.9%

NTARY

markets went through
/sm of fear on Aug. 4,
icing their worst de-
f the year. The Dow
industrial average
299 points to 8487—
decline. The Standard
500-stock index also
ished, falling 3.6% in
ading volume. Small-
:ks were not as badly
nd yields rose as in-
snapped up Treasury
The jitters continued
5. In a seesaw day,
fell 125 points late in
but recovered by the
ading.

U.S. MARKETS	Latest	% change Week	Year
Dow Jones Industrials	8546.8	–4.1	3.5
NASDAQ Combined Composite	1788.2	–5.0	9.7
S&P MidCap 400	329.2	–4.9	3.2
S&P SmallCap 600	168.0	–6.2	–4.0
S&P SuperComposite 1500	228.4	–4.1	11.0
SECTORS	**Latest**	**% change Week**	**Year**
Bloomberg Information Age	351.2	–3.0	13.5
S&P Financials	129.7	–4.8	17.4
S&P Utilities	230.3	–2.5	14.6
PSE Technology	334.9	–2.4	–0.8
FOREIGN MARKETS	**Latest**	**% change Week**	**Year**
London (FT-SE 100)	5632.5	–3.6	12.1
Frankfurt (DAX)	5632.5	–3.8	29.9
Tokyo (NIKKEI 225)	15,992.2	–1.0	–18.8
Hong Kong (Hang Seng)	7466.4	–4.4	–54.9
Toronto (TSE 300)	6731.0	–3.8	–2.9
Mexico City (IPC)	4055.3	–6.6	–22.2

FUNDAMENTALS	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.46%	1.38%	1.57%
S&P 500 P/E Ratio (Last 12 mos.)	26.6	27.6	23.9
S&P 500 P/E Ratio (Next 12 mos.)*	20.5	22.0	19.1
First Call Earnings Revision*	–2.64%	–2.30%	–1.20%

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 200-day average	1046.1	1042.4	Positive
Stocks above 200-day average	28.0%	37.0%	Positive
Options: Put/call ratio	0.55	0.54	Negative
Insiders: Vickers Sell/buy ratio	1.46	1.47	Positive

Data: Bloomberg Financial Markets; *First Call Corp.

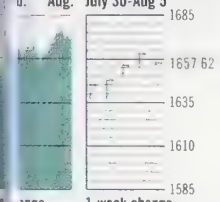
BEST-PERFORMING GROUPS	Last month %		Last 12 months %
Pollution Control	9.4	Specialty Appar. Retailers	70.2
Semiconductors	8.9	Broadcasting	69.9
Computer Systems	7.7	Automobiles	56.5
Tobacco	7.0	Long-Dist. Telecomm.	52.1
Photography/Imaging	6.8	Communications Equip.	47.0
WORST-PERFORMING GROUPS	**Last month %**		**Last 12 months %**
Oil & Gas Drilling	–28.0	Oil & Gas Drilling	–55.9
Oil-Well Equip. & Svcs.	–23.2	Metals	–49.6
Engineering & Constr.	–21.2	Engineering & Constr.	–43.7
Oil Exploration & Prod.	–19.8	Gold Mining	–36.6
HMOs	–18.5	Instrumentation	–32.6

BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness	Price	1-month change
America Online	111	–2 1/4
Citicorp	154	–3 15/16
Pfizer	104 3/4	–4 3/4
MCI Communications	59	–1 1/2
Yahoo	85 1/8	–14 1/2
Merrill Lynch	90 3/8	–10 5/8
Decline ahead? Stocks with most significant selling on price strength	**Price**	**1-month change**
Cisco Systems	93 1/8	1/8
Dell Computer	105 13/16	14 1/16
Compaq Computer	32 1/16	3 5/16
Applied Materials	32 1/2	2 1/8
Ciena	72 3/16	1 7/16
Johnson & Johnson	73 1/2	1 1/8

EST RATES

JRY BOND INDEX
b. Aug. July 30-Aug 5



nge 1-week change
+1.3%

nberg Financial Markets

KEY RATES	Latest week %	Week ago %	Year ago %
MONEY MARKET FUNDS	5.11	5.10	5.17
90-DAY TREASURY BILLS	5.07	5.07	5.28
6-MONTH BANK CDS	5.06	5.06	5.17
1-YEAR TREASURY BILLS	5.28	5.37	5.50
10-YEAR TREASURY NOTES	5.44	5.52	6.21
30-YEAR TREASURY BONDS	5.66	5.77	6.48
LONG-TERM AA INDUSTRIALS	6.34	6.37	6.93
LONG-TERM BBB INDUSTRIALS	6.83	6.86	7.29
LONG-TERM AA TELEPHONES	6.65	6.75	7.19

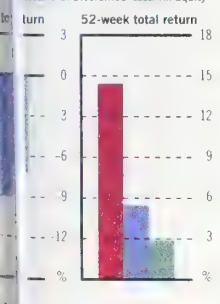
BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond Latest week	10-yr. bond Last week	30-yr. bond Latest week	30-yr. bond Last week
GENERAL OBLIGATIONS	4.41%	4.43%	4.95%	4.98%
PERCENT OF TREASURIES	81.15	80.29	87.38	86.41
TAXABLE EQUIVALENT	6.39	6.42	7.17	7.22
INSURED REVENUE BONDS	4.57	4.59	5.18	5.19
PERCENT OF TREASURIES	84.10	83.19	91.44	90.05
TAXABLE EQUIVALENT	6.62	6.65	7.51	7.52

L FUNDS

U.S. Diversified All Equity
turn 52-week total return



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EQUITY FUNDS

Leaders Four-week total return	%	Laggards Four-week total return	%
ProFunds UltraBear Investor	17.2	Fidelity Sel. Energy Serv.	–25.4
Potomac U.S./Short	8.9	Rydex Energy Svcs. Inv.	–23.7
Matthews Korea A	8.5	Crabbe Huson Special	–22.2
Rydex Ursa	8.4	Guinness Mainland China	–21.3
Comstock Part. Cap. Val. R	6.6	State St. Res. Glob. Res. B	–21.2
Leaders 52-week total return	**%**	**Laggards 52-week total return**	**%**
Weitz Hickory	51.5	Lex. Crosby Sm. Cap Asia	–70.0
Scudder Greater Europe Gr.	49.9	Lexington Troika Russia	–68.6
Transamerica Prem. Sm. Co.	48.8	Montgomery Emerg. Asia R	–68.4
Invesco European	48.7	Guinness Flgt. Asia Sm. Cap	–68.1
Icon South Europe Region	48.2	Matthews Pacific Tiger I	–64.5

EQUITY FUND CATEGORIES

Leaders Four-week total return	%	Laggards Four-week total return	%
Europe	–2.0	Natural Resources	–13.6
International Hybrid	–2.1	Small-cap Growth	–12.2
Japan	–2.4	Small-cap Blend	–12.0
Foreign	–3.2	Real Estate	–11.4
Diversified Pacific/Asia	–3.6	Small-cap Value	–10.7
Leaders 52-week total return	**%**	**Laggards 52-week total return**	**%**
Europe	28.0	Pacific/Asia ex-Japan	–56.5
Communications	23.6	Diversified Pacific/Asia	–42.7
Utilities	19.0	Precious Metals	–38.6
Financial	17.9	Diversified Emerging Mkts.	–35.1
Large-cap Growth	13.9	Latin America	–28.5

of market close Wednesday, Aug. 5, 1998, unless otherwise indicated. Industry S&P 500 companies only. Fundamentals, technical indicators, Bloomberg money flow analysis, and mutual fund returns are as of Aug. 4. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

CHARTS by Argus, primarily MetaStock

WALL STREET AND THE ECONOMY

The stock market swoon is a wake-up call. Baby boomers who couldn't find the discipline to save for their retirement most of their lives have recently been counting on a rising tide of equities to save them in the home stretch. Indeed, recent government figures show that the U.S. savings rate, already low by international standards, fell two percentage points over the past year, to only 0.6%. While this minuscule number is partly due to a statistical revision, the trend in the savings rate is clearly down—and sharply. The good news is that an extraordinary stock market performance has created enormous wealth and improved the household balance sheets of millions of families. Boomers, keeping to form, have been using that wealth to spend more than their income. That has kept the economy rolling along nicely (page 30).

The bad news is that the decision to spend and not save may have made U.S. growth dangerously dependent on high equity prices. Over the past six years, the wealth effect has added significantly to consumer spending. Today, with Asia in deep recession, exports plummeting, and manufacturing stagnant, only consumer spending is propping up the economy. Should the recent drop in stock prices prove to be a more serious correction, that prop could be kicked out.

A look at the numbers shows that swings in equity are increasingly influencing retail sales. Options, 401(k) and mutual funds have made most of the middle class but edgy, participants in the market. During the pa years of the long bull market, a surge in the Stand Poor's 500-stock index has lifted retail sales. Whenev S&P 500 has dropped, however, retail sales have slow that kind of lockstep continues, a sharp correction, let a bear market, could slow consumer spending—and ec growth—considerably.

The worry is that the U.S. may be getting itself in same kind of bind that crippled Japan when the Nikke average peaked and that country's economic bubble b decade ago. By depending on asset wealth to finance spending, households in the U.S. may be getting hoo the good life. In the short run, this overzealous consu is helping to overcome the negative impact of the As cession on the U.S. economy. But savings should serv term goals, although there may be a short-term cost. long haul, growth is better served when spending and are in synchrony and when new-found wealth is socke for the future.

AUSTERITY ISN'T WORKING IN ASIA

Asia's nascent middle class, the pride of that region just a year ago, is being destroyed. One of the world's largest and history's newest middle class, it is being squeezed back down into poverty by the worst recession in decades. The consequences are staggering. Nothing less than the spread of democratic capitalism and global economic growth is being threatened. A major effort to refinance and reflate the Pacific Rim is needed now. The policies of austerity and monetary restraint, proposed and enforced by the International Monetary Fund and the U.S. Treasury, have failed to restore investor confidence or economic stability.

The buying power of Asia's middle class has been a prime engine of growth for the global economy throughout the 1990s, absorbing enormous amounts of food, energy, manufactured goods, and services. The impact of its impoverishment can be seen everywhere, from lower U.S. corporate earnings to plummeting oil and grain prices in Russia and Argentina.

No one disputes that Asians themselves are responsible for much of their difficulties and must take painful steps to change. Korea's *chaebol*, which triggered that country's crisis through an orgy of borrowing, continue to fight off attempts to downsize and restructure. But the IMF, by insisting on sky-high interest rates in exchange for arranging $57 billion in loans, is squeezing the life out of the economy. Unemployment has doubled to 7% in one year and may hit 10% before the economy bottoms out. The middle class is getting eviscerated.

In Japan, the unemployed are less vocal—though numerous. Japan's official unemployment rate hit a 4.3% in June, but 10% may be closer to the truth. Offic tistics obscure hidden joblessness, while sharp cuts in p dermine many of those who remain employed. Ban not lending, consumers are not spending, prices are profits are dropping, and the economy spirals downw

"Recession" doesn't describe what is happening in A U.S. or European minds, a recession usually mea quarters of mildly negative growth. In Asia, the economy has contracted 5% in the past 12 months. Tha down 10%, Indonesia 20%, and Japan has seen three q of negative growth, the last off 5% on an annual basi shows signs of bottoming out yet (page 46).

The solution to this economic crisis is liquidity. It clear that a financial crisis that had its origins in ex private borrowing should never have been treated v cessive public-sector austerity. The IMF and the U.S. T must shift course and work to lower interest rates an more money into economic growth. Japan, for its pa reform its banks to get money flowing to needy bus Without Japanese growth, Asia is doomed to years nation. History abounds with examples of promising c that have stalled out in their development. It is in the e terest of all the participants in the global econo Asia's middle class be rescued.

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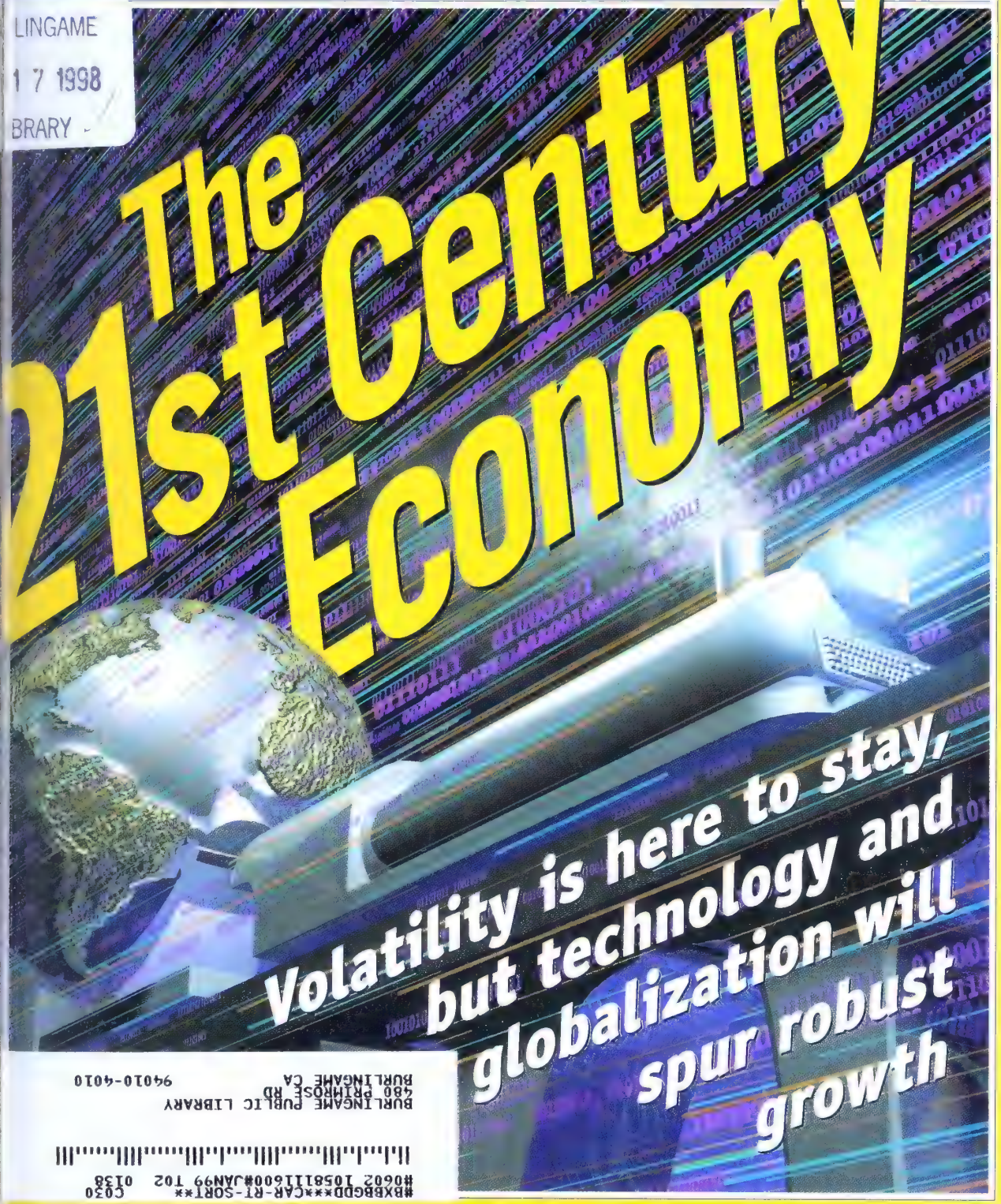

The 21st Century Economy

Volatility is here to stay, but technology and globalization will spur robust growth

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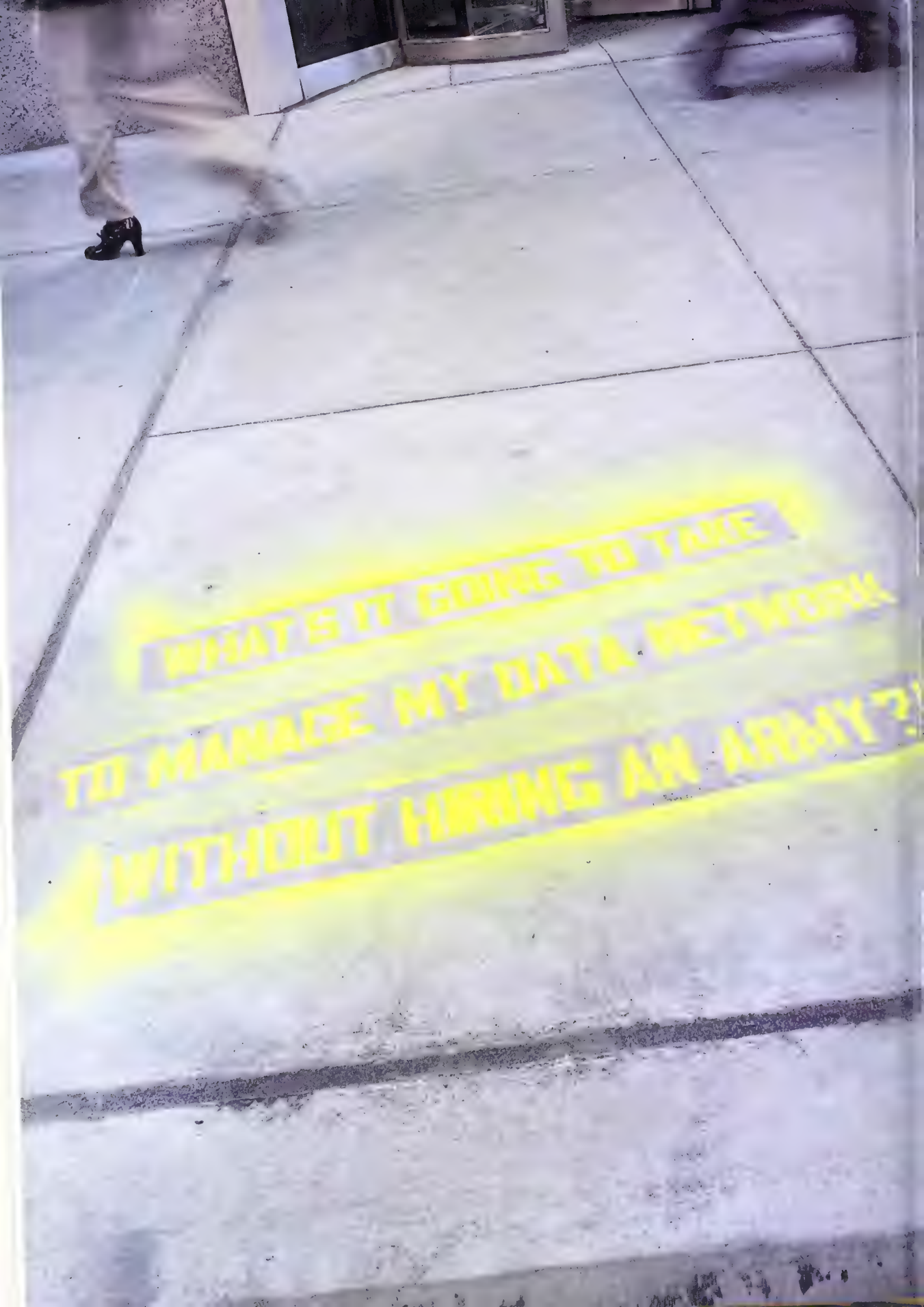
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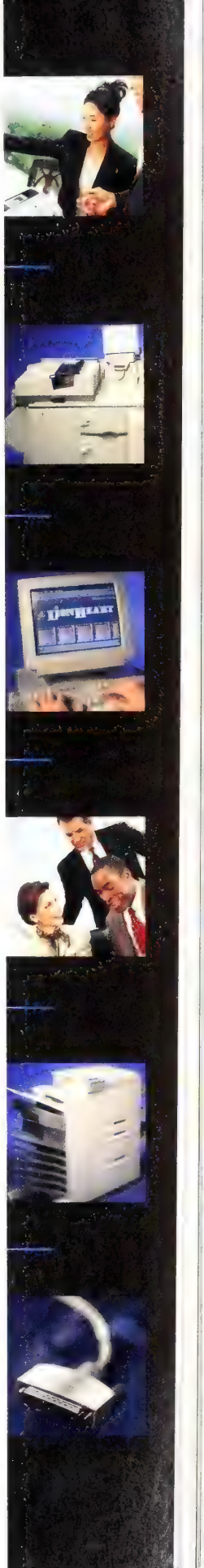

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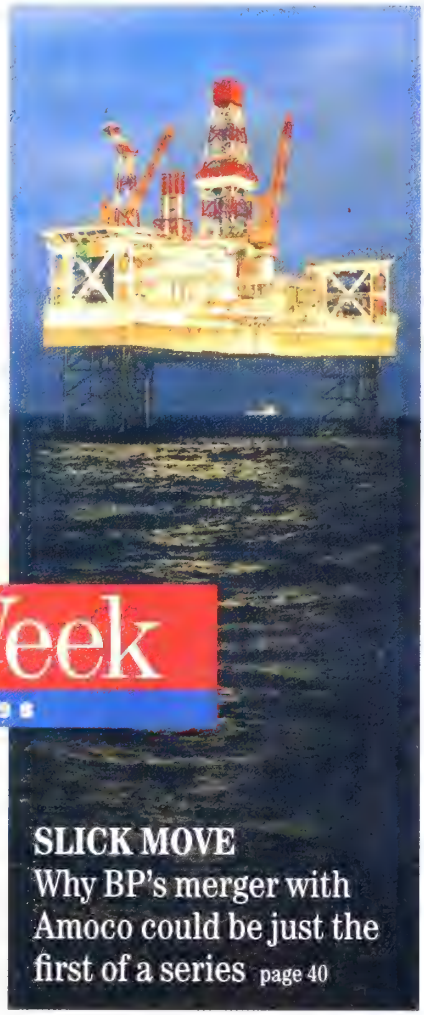

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Editor's Memo

THE 21ST CENTURY: A SNEAK PREVIE

Three summers ago, BUSINESS WEEK introduced its readers to the idea that the U. S. economy was undergoing a metamorphosis. The economy would no longer be plagued by anemic growth, low productivity, and recurrent inflation, went the theory. Rather, the forces of technological advance and global competition were creating an economy in which fast growth and low inflation could live side by side. Best of all, most Americans' standard of living would rise.

MIKE MANDEL

The New Economy, as we called it, came under sharp fire, mostly from some traditional economists. But Federal Reserve Chairman Alan Greenspan seemed to share our view, and he wisely has held the line on interest rates, even though growth has continued strong and labor markets have tightened.

The data, though incomplete, are starting to support the concept of the New Economy. Over the past three years, growth has been well above the trend of the previous two decades, while inflation, instead of accelerating as traditionalists warned, has been falling. Perhaps most important, wages, which had been lagging, were suddenly catching up. We were especially heartened when the July revisions to the data showed that economic growth over the past three years was on average 3.3% a year—0.4 percentage points higher than originally reported.

It should come as no surprise, therefore, that we have chosen to devote our summer double issue to a broad-based analysis of what the 21st Century Economy will look like. Will growth remain robust? Will the [illegible]dard of living rise? What breakthroughs in technology are we li[illegible] to see—not only in information t[illegible]nology but also in biotech and fi[illegible] How will new technology transfe[illegible] our manufacturing sector? What [illegible] will the executive nee[illegible] order to effectively m[illegible]age? Where are the n[illegible] technology hot spots [illegible] around the globe? An[illegible] much, much more.

Economics Editor Michael J. Mandel, w[illegible] spearheaded our New Economy coverage, d[illegible]ed the project. Mike [illegible] the coveted Gerald L[illegible] Award this year for h[illegible] cover stories "The Ne[illegible] Business Cycle" and "How Long[illegible] This Last?" Mike, who holds a P[illegible] from Harvard University, joined[illegible] NESS WEEK in 1989 from the Ste[illegible] School of Business at New York[illegible] versity, where he was assistant [illegible] fessor of economics. Working clo[illegible] with Mike were Chief Economis[illegible] William Wolman and Associate E[illegible] Keith Hammonds, who helped co[illegible]nate the efforts of more than 30[illegible] porters and editors to produce t[illegible] 60-page report.

Senior Art Director Francesca Messina created the glorious des[illegible] for the Special Issue. Associate P[illegible]ture Editor Andrew Popper was [illegible] sponsible for the striking photog[illegible]

This is not your usual summe[illegible] But if you want to find out what[illegible] 21st Century Economy has in st[illegible] for you, it's must reading.

Stephen B. Shep[illegible]

Editor-in-[illegible]

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SUCCESS STORY? IRGIA

esult of its International Mon- nd-supported economic reform the country of Georgia is a s Gary S. Becker states in "A ket winner vs. a Soviet-style Economic Viewpoint, Aug. 3). ess, Georgia still needs to raise enues. Tax receipts amount to 10% of gross domestic product. ers only two-thirds of spend- vonder the IMF is pressing the ent to increase its revenues. as Becker implies, by raising . Rather, we recommend re- exemptions to widen the tax improving compliance.

MF-supported programs, Geor- radually raised revenues from zero five years ago to 10% of y. That is one of the keys to remarkable stabilization from ation in 1994 to less than 10%- m inflation now. Other re- ncluding privatization, im- nt of corporate governance, sound financial system, and an ent and well-functioning sys- creating the basis for greater nt, sustainable growth, and a in the size of the underground Gary Becker is surprisingly nark in his analysis of Geor- omy and the IMF's role in this e success story.

John Odling-Smee
Director, European II Dept.
International Monetary Fund
Washington

JT FAIR JTIVE DIVORCE

any, the most painful and un- f divorce is deciding about chil- custody ("Divorce, executive style," Cover Story, Aug. 3). The historic bias is unequivocal: Women receive sole or majority custody in almost all cases.

Property division is typically done independently of custody issues. In most cases, a husband and wife split their assets 50-50 and then divide the caretaking and raising of children on an 80-20 basis, often with large monthly child-support payments (that are untaxed to the recipient) to the mother. Does this seem fair to the father or the children involved?

While 1990s America is comfortable with an even split in property, it appears to be resisting a natural, equitable time-share for children with their parents. This seems to have been lost on Alice Hector, who, as noted in your story, was "outraged" that her husband

CTIONS & CLARIFICATIONS

cation in "Can record labels get rhythm?" (Entertainment, July 27) King CDs were selling poorly was

sed in "Sanctions against Cuba: nning of the end?" (Washington ug. 3), representatives of 40 com- id visit Cuba, but only 11 were companies. Also, the Commerce vorable attitude toward exporting testing in Cuban labs applies to approved for use in the U. S., not rimental drugs.

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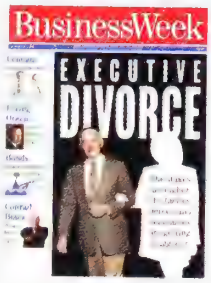
was awarded custody after being a stay-at-home dad. If the $300,000-per-year lawyer-parent were the father and not the mother, this would be hardly worth mentioning. The mother would get half the assets, custody, monthly child support, and alimony—and nobody would think twice.

Until men and women can see that there are issues on both sides that merit collective evaluation, there will remain large gaps in perceived bias by the two sexes, as clearly documented in your polling data.

Mark Kelley
Del Mar, Calif.



BAD BUSINESS

"Corporate boards, with more at stake than the personal life of one executive, may increasingly distance themselves from embattled and distracted workers"

Although the social stigma of divorce has lessened, there is, as you show, a new disincentive to corporate divorce—namely, the sizable cost a divorcing executive's company absorbs in resources, time lost, and opportunities missed—not to mention the bad publicity.

Corporate boards, with more at stake than the personal life of one executive, may increasingly distance themselves from embattled and distracted workers. Lacking corporate support, executives contemplating divorce may think twice and try a little harder to make their marriages work.

Michael W. Kalcheim
Chicago

The divorce settlements sought by housewife spouses of corporate executives are startling and insulting—especially to other wives who have balanced day-to-day family responsibilities with dual-career challenges, too. These executive housewives enjoy fine lifestyles supported by their high-achieving husbands—lifestyles that often include household help, caterers, nannies, club memberships, a social whirl plus. More, they enjoy great opportunities ar to pursue independent interest endeavors, intellectual and pe growth within marriage.

How unfortunate that these tives chose dependent and self-ab women over independent and inte women of substance.

L
Old Greenwich,

HOW TO KEEP MUTUAL-FUND MANAGERS HONEST

Gary Weiss's "The SEC should fund managers honest" (Finance 3) is right on the mark in all h push to restrict fund managers sonal trading severely—so tha may invest only in shares of r funds.

Full disclosure of the manager sonal holdings in the fund prospe long overdue—together with a c ethics. But punishing the ethical agers because of the actions of bad apples will discourage fund agers in general, and will thereb the fund holders. Furthermore, th apples will always be able to their trading activity through v

Nothing validates a consistent principle more

making Mr. Weiss's suggested
evant.
al answer to the situation is
make the codes of ethics uni-
ss the industry and to enforce
rously through the use of state-
technology. Rigorous self-en-
is already in place at many of
g-edge firms, which have suc-
utomated their personal trading
e, making it necessary for all
; to "pre-clear" their trades to
potential conflicts of interest.
irms have invested heavily in
y to protect the interest of in-
Regulatory agencies have also
n technology, including artificial
e-driven software, to root out
ivity of a more surreptitious
alancing the interest of the
l professionals in the fund in-
perfectly practical right now.

Mitchel Kraskin
President
Compliance Tools Inc.
New York

CK FACTOR' IS LY RIGHT-WING

s no "Black factor," as Cana-
a mogul Conrad M. Black said
SS WEEK ("The Murdoch of
1," People, Aug. 3). Unfortu-
nately, Black's assurances don't hold up to scrutiny. Even a cursory examination of the *Chicago Sun-Times*, Black's flagship U. S. newspaper since his company purchased it in March, 1994, tells a different story.

Over the past 4½ years, Black's *Sun-Times* has shrunk its news-related staff, increased the paper's ad-to-news ratio, and shifted its editorial and opinion pages dramatically rightward. That's no small feat, considering that 10 years earlier, the *Sun-Times* was the property of Rupert Murdoch's News Corp. The evidence suggests that Black's political prejudices play a considerable role in the way his media properties construct their versions of the world.

David Peterson
Evergreen Park, Ill.

SECONDHAND SMOKE: THE JUDICIARY IS BLIND

Paul Raeburn's "Secondhand smoke: It's deadly, period" (News: Analysis & Commentary, Aug. 3) made me realize how wrong and out of touch with reality our judicial system is. When U. S. District Court Judge William L. Osteen Sr. can decide with the stroke of his pen that all the years and years of research and work performed by the Environmental Protection Agency did not demonstrate the dangers of secondhand smoke, we as concerned citizens should all be outraged.

William I. Dollar
Santa Cruz, Calif.

THE 'FIELD OF DREAMS' OF THE '90S: THE LABOR MARKET

"Killer hours are a myth" (Economic Trends, Aug. 3) purports to argue that Americans are not working more and that this is contrary to the usual image of the overworked American.

Unfortunately, the article misrepresents my earlier work in this area and ignores the most recent research. The 66-hour-per-year increase in annual working time that took place between the late 1960s and 1980s is anything but trivial. It is equivalent to a week and a half of extra full-time work each year and reflects a sharp reversal from the downward trend in annual hours before 1982.

Moreover, in new research that includes data through 1995, we find that the upward trend in hours continues right through the first half of the 1990s. Indeed, the average figure for weekly hours among prime-age workers has risen to 41 hours, the highest in the past 25 years.

While this trend toward long working

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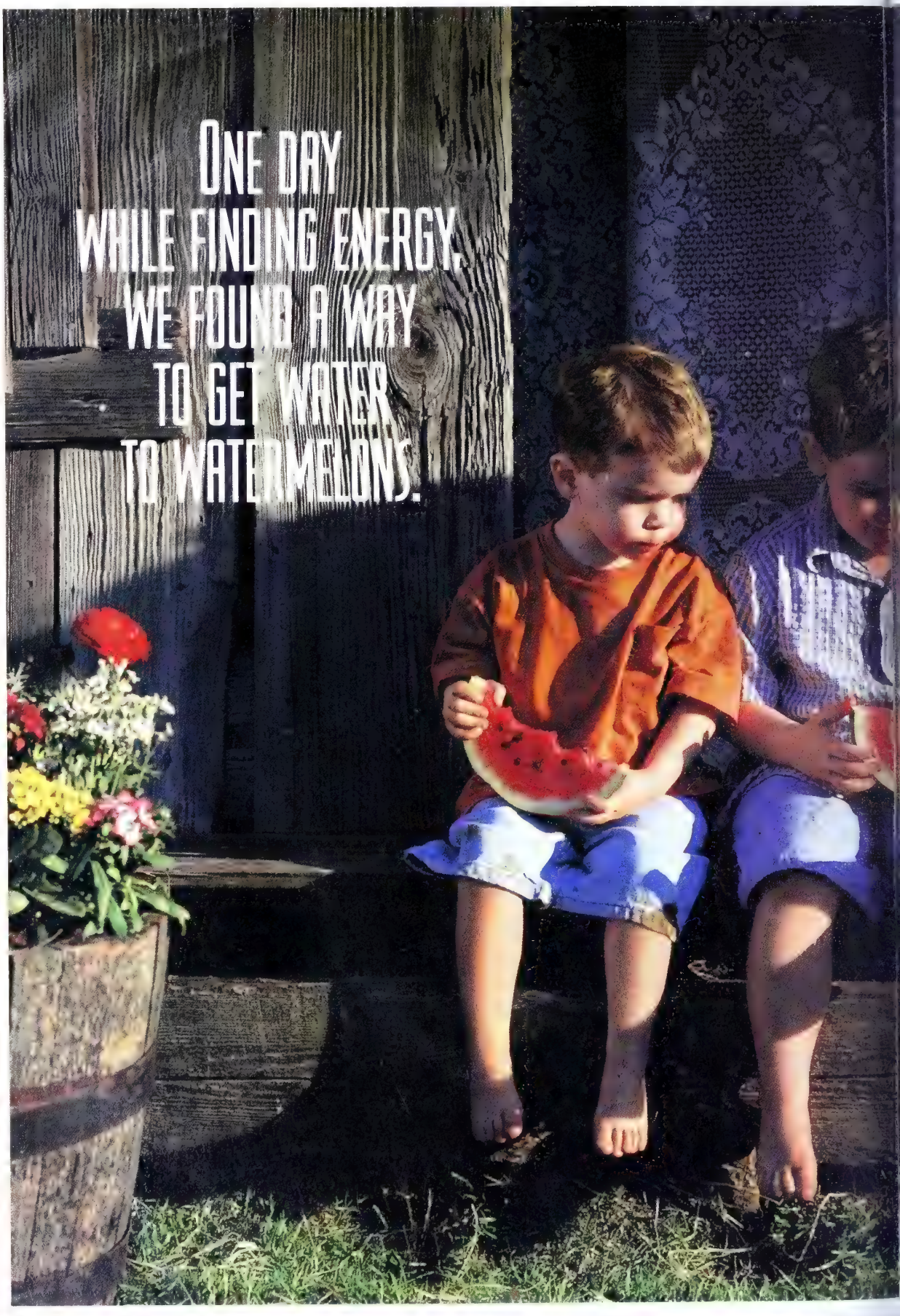

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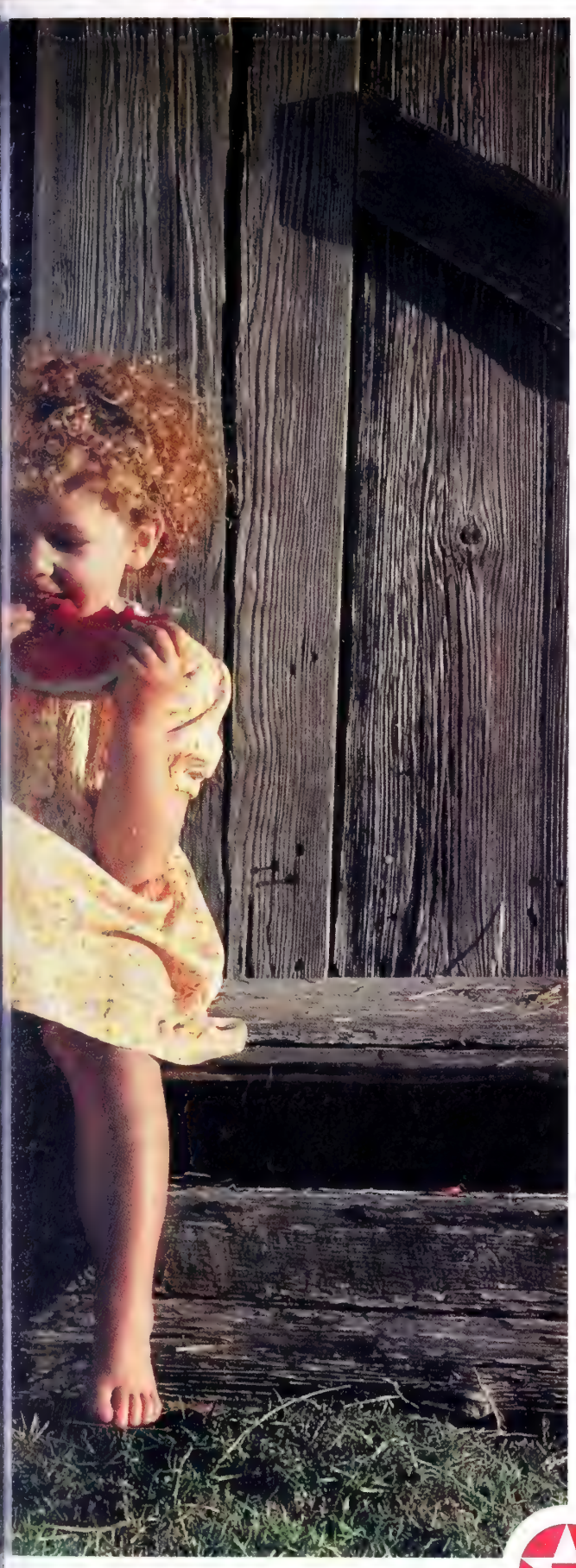

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time by experienced workers n places greater stress on families a be contributing to the lower level engagement in all types of volun ganizations, it has one powerful macroeconomic effect: We now fi we can get down to national un ment rates well below 5% witho ning the risk of runaway inflation because as demand for workers in part of the demand is being satis increased working time by those working. The sharp increase in time among Americans helps to the mystery of price stability in t growing economy. We have a "I Dreams" labor market where, if yo increased demand, there is increas ply to meet it.

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Professor, Political Ec
University of Massac

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IGITAL AY?

year is 2005. An Iran-backed amic fundamentalist sets off nbs in an oil field in China's sin, where Beijing has been hnic Chinese from other areas the region's Moslem popula- a retaliates by sinking an Iran- ıker and, more ominously, de- blockade of the Strait of a key passage for oil to Asia. U. S. weighs its options, it re- oesn't have the troop strength between the two sides. So it cyberweapons—Trojan horses in- urs earlier in com- ina had imported. Beijing's phones nd water to the rges Dam hydro- ower plant slows e. Then the Pres- presses concern agricultural crisis lam—before Chi- ers even know a xists. They come and that the U. S. g some mysterious and formi- vers. And, in accordance with es, the Chinese back away from ontation with Iran.

ber silver bullet is the culmi- the opening scenario in *The ld War: Computers Are the and the Front Line Is Every-* irst-rate and timely primer on on warfare (IW) by United ernational CEO James Adams. Adams is a believer in IW, he it's not really a panacea. In- of the book's strengths is that ndidly discusses not only the f IW but also its technical, bu- , and even moral pitfalls. xactly, is information warfare? nplest, it's a strategy for un- the enemy's data and information systems, while defending and exploiting one's own information edge. It includes cutting-edge gizmos such as airborne or space-based sensors that can give a soldier unprecedented knowledge of enemy battlefield positions and guide "smart" weapons to their destination. It extends to stealing an enemy's data and disrupting its networks with viruses. And it involves tracing hostile hackers with an "automated security incident measurement," a scheme that splashes intruders with an electronic identifying marker—without alerting them—thus enabling cybercops to follow them on the Net. Adams, perhaps too ambitiously, goes even further, including discussions of old-fashioned propaganda, nonlethal weaponry, and economic espionage.

The goal is to enable soldiers to inflict lethal damage even as they stay far from the line of fire. Minimizing spilled blood is a critical political requirement in the CNN Age. But there is a debate under way in military circles about whether this "revolution in military affairs" will occur. Anyone who has had a computer crash would worry about risking lives by making troops so dependent on temperamental equipment. Skeptics argue that IW will not fundamentally alter the way in which wars are fought but will merely speed and expand the flow of data to generals and grunts, possibly giving both groups information indigestion. This book can help the public understand this heated debate, which has vast implications for the future of defense budgets and the willingness of political leaders to use force.

As much as Adams focuses on technology, he does not neglect the human

OMPUTERS CAN ZAP A POWER D, BULLETS MAY BE OBSOLETE

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There's no cybersubstitute for
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e is caustic in his criticism of
Clinton's flip-flops in Haiti and
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, and Adams repeatedly blasts
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ter stage though, when IW ac-

tually is used, a decentralized approach can be problematic—or even fatal. Assume that a friendly IW operation penetrates an enemy information network and uses it to put out info that advances the friendly cause. Friendly sensors outside the IW unit pick up the data and assume it's really from the enemy. That's not far-fetched—it's exactly what happened when, because of American spy Aldrich Ames, the Soviets turned CIA agents and fed the U.S. false information. The CIA suspected the information was bogus, but to preserve the counterintelligence operation against Ames, did not tell other government agencies. Even more decentralized operations mean greater uncertainty for all sides, with potentially destabilizing effects.

> At the Pentagon, a debate rages over how much to rely on information warfare

This is one of the issues Adams raises in a fascinating discussion of the morality of IW. He notes that during the last revolution in military affairs—the development of nuclear bombs—the morality of the new weapons was discussed from the outset. There has been no similar debate about IW, but Adams raises several ethical issues. Nukes served as a deterrent that kept the cold war from turning hot. In creating stability and therefore peace, atomic weapons could be seen to have right on their side. IW, in contrast, may create instability and thus raise the risk of conflict. So, it could be argued that there's less of an ethical justification for IW. Similarly, one purpose of IW is to minimize not only troop casualties but also civilian injuries. Yet if you shut down an electricity grid, incubators in hospitals could be turned off, killing babies just as surely as if they had been shelled.

Adams doesn't try to resolve these issues. Nevertheless, it's inevitable that the military of the future will be dependent on IW to a greater or lesser degree. A whole new legal, diplomatic, and strategic framework is needed to deal with it. In this readable, anecdote-filled volume, Adams makes that case cogently.

BY STAN CROCK

Crock covers national security in BUSINESS WEEK's Washington bureau.

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BY JEFFREY E. GARTEN

THE FED SHOULD LOOK FARTHER THAN ITS OWN BACKYARD

NEW WORLD: Fed policies now have global effects. And harm they may cause in other nations can eventually take its toll on the economy at home

In a rapidly globalizing marketplace, you might think that the interests of the U.S. and the rest of the world would generally be the same. But when it comes to Washington's most critical financial decisions, the setting of interest rates by the Federal Reserve, America's actions may harm other nations—eventually to its own detriment. How can this be?

While the Federal Reserve has evolved into the role of the world's central banker, its legal mandate and its mind-set remain sharply focused on price stability and full employment in the U.S. This makes taking a truly global view extremely difficult. Fed Chairman Alan Greenspan said as much in late July, when he told Congress that despite the Fed's potential for clobbering foreign markets, "our objectives relate to domestic economic performance." The minutes of the May meeting of the Federal Open Market Committee (FOMC), the Fed's rate-setting group, also reveal strong convictions among members that the Fed should not take into account the foreign impact of U.S. actions.

Established in 1913, the Fed is a classic example of an institution created for a world that no longer exists. Back then, Washington was preoccupied with controlling a chaotic banking system, and global prosperity rested on England and the gold standard.

LONE RANGER. Today, Fed decisions have far more influence on foreign countries' interest rates, currencies, stock markets, commodity prices, real estate values, and gross domestic product. Because economics are driving politics in emerging markets, the Fed can create either political tensions or new opportunities for young democracies struggling to build genuine free-market societies. In recent decades, the central bank received help from its more prominent overseas counterparts when together they would try to synchronize monetary policy. But with the Bank of Japan focused on the crisis in Tokyo and Germany's Bundesbank preoccupied with the euro, the Fed now stands alone as the world's de facto central bank.

When the FOMC meets on Aug. 18, it is likely to keep rates steady, thanks to a slowing economy and a shaky stock market. But look for agonizing trade-offs as early as next month. If strong U.S. growth resumes, labor markets tighten, and the equity markets are reasonably steady, the Fed could be forced to raise rates. This would drive the yen, provoke another round of de tions throughout Asia, deepen the rece from Seoul to Jakarta, and weaken and Brazil.

A different scenario would arise if th economy continues to lose steam but inflation rises. Then the Fed might not to lower rates. That would endorse er U.S. economic growth, which mig desirable—but ensure slower growth the world, which would be dangerous.

No one advocates that the Fed should its duty as guardian of domestic pric bility. The question is more nuanced there occasions when the Fed should se with an eye toward global stability, o global growth, if that means a slightly ent level from that required to mee short-term needs of the U.S. economy

WORLDVIEW. The answer is yes. Am interaction with other nations is now mous. A third of its growth for most 1990s has come from exports, and a th Treasury securities are bought by forei vestors. As the past few weeks have demonstrated, conditions beyond U.S. are increasingly affecting corporate and stock prices. Lurking in the backg also could be a rise in unemployment res from declining exports.

Is it possible to envision a Fed t more sensitive to its impact on other n and the boomerang effect on the U.S.? it could make theoretical sense to mod the central bank's charter to provide international flexibility, no sane Administ would allow the current inward-looking gress, which cannot even muster suppo the International Monetary Fund, to tr

Members of the FOMC could help b struing their legal writ more broadly t account of the feedback effect on the economy of what the Fed does to fo countries. And more Fed governors and idents of regional branches of the Fed be selected for their international exper At present, they are chosen accordi much narrower qualifications, such as suring the domestic money supply, or expertise in community investment. (Th ter is what the Administration says it in its next appointment for Fed gove Changes like these take time. But wi them, a global debacle waits in the win

Jeffrey E. Garten is dean of the Yale School of Management. A former investment banker, he was Under Secretary of Commerce for International Trade in the first Clinton Administration (jeffrey.garten@yale.edu).

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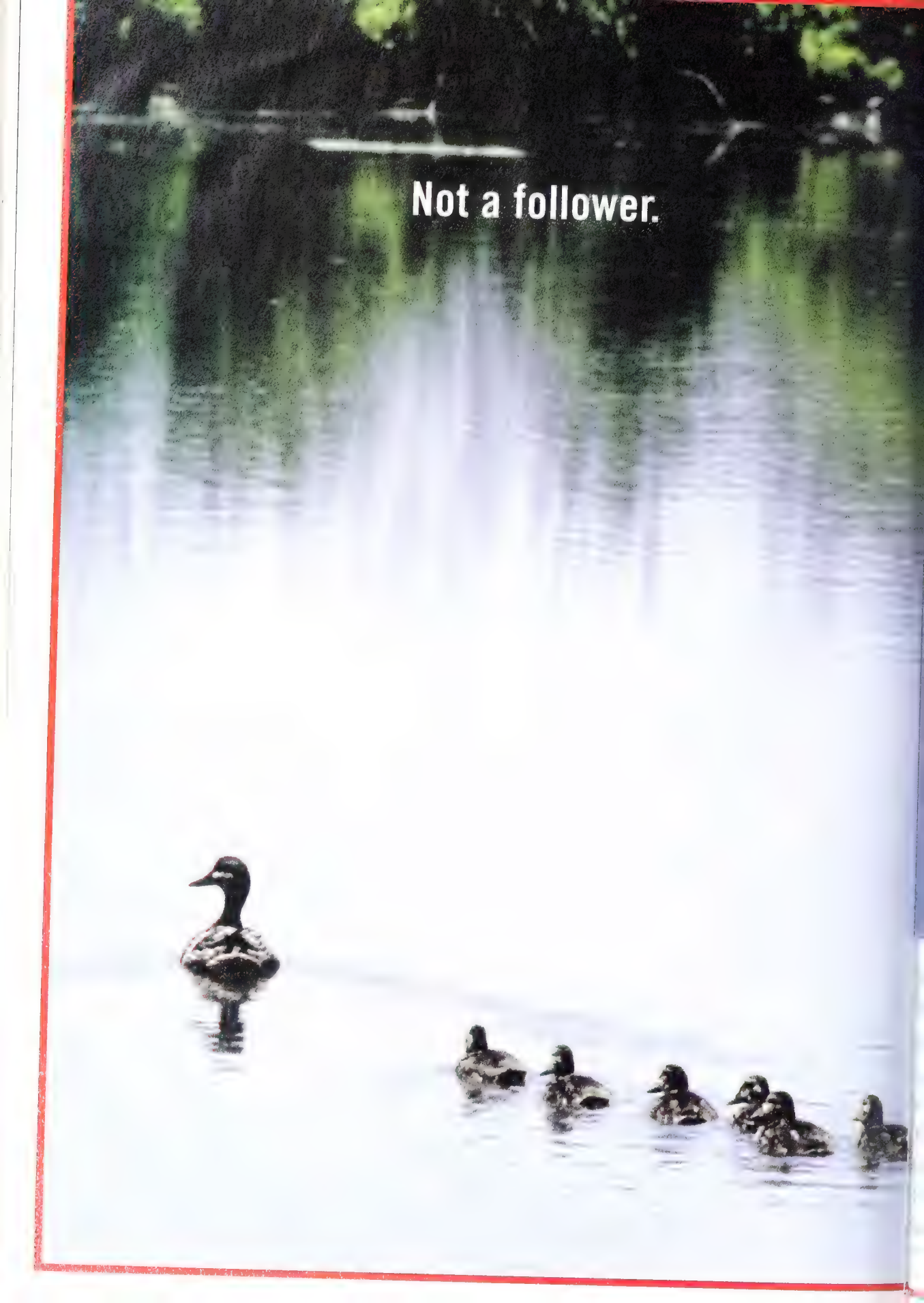
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NEC

Rhône-Poulenc reports 29% gain in net earnings in second quarter 1998

"The successful listing of Rhodia on the New York and Paris stock exchanges marked the last step in the transformation of Rhône-Poulenc, as announced in June 1997. Today we can focus on maximising the potential of our new products and improving profitability - the growth in earnings during the first half is in line with this strategy. Our objective continues to be a 20% increase in earnings per share over the full year, although this remains an ambitious goal."

Jean-René Fourtou
Chairman & Chief Executive Officer

Consolidated accounts
second quarter 1998

Sales: FF22.3 billion (+2.8%)[1]

Net income: FF2.6 billion

Excluding non-recurring items[2]:
- *Net income: FF1.2 billion (+29%)*
- *Earnings per share: FF3.28 (+16%)*
- *Earnings per share before goodwill amortization: FF4.26 (+17%)*

This increase in earnings confirms the growth recorded in the first quarter 1998. Overall, for the first half of the year, net income (excluding non-recurring items[2]) increased 29%, to FF2 billion. Earnings per share amounted to FF5.7 (FF7.6 before goodwill amortization).
For the first half of the year, consolidated net sales rose 7% to FF44.3 billion.

Pharma Sector

Rhône-Poulenc Rorer,
Pasteur Mérieux Connaught, Centeon

Consolidated net sales:
FF8.4 billion (+6.2%)

Earnings from operations[3]:
FF1.2 billion (+33.1%)

- Growth in demand remains strong for strategic products such as the anti-cancer agent, Taxotere®, the low-molecular-weight heparin, Lovenox®, the anti-allergy medication, Nasacort® and vaccines. In the respiratory business, a strengthened sales promotion campaign has curbed the erosion in market share.
- However, sales growth in a number of products has been impacted during the second quarter by some destocking at wholesale level in the U.S.

Rhône-Poulenc is a leading life sciences company, growing through innovations in human, plant and animal health

and through its specialty chemicals subsidiary, Rhodia.

- The growth in earnings fro operations[3] is due to an improveme in product mix and the first positi effect from Centeon's recovery.

Plant & Animal Health Sector

Rhône-Poulenc Agro,
Rhône-Poulenc Jardin,
Rhône-Poulenc Animal Nutrition, Meria

Consolidated net sales:
FF4.4 billion (-1.7%)

Earnings from operations[3]:
FF1.0 billion (+13.8%)

- The growth in new product sale like the insectiside Regent® and t external antiparasitic Frontline partly compensated for some unf vorable events (the economic situ tion in Asia, bad weather in th United States, disruptions of suppli from Temik® distributors, etc.) whi affected sales performance.
- As part of its development strate in plant biotechnology, Rhône-Poule Agro signed a partnership agreeme with the American company Mycoge This agreement aims to develop a market genetically modified plants a seed products, cotton and sugarca being the first markets.

Rhodia

Consolidated net sales:
FF10 billion (+1.7%)

Earnings from operations[3]:
FF856 million (+44.4%)

- The continued refocusing of th porfolio on specialty chemicals a productivity measures contributed the significant improvement Rhodia's earnings.
- Rhodia benefited from goo growth in most of its markets, particular the Polyamide a Services & Specialties Division.
- For the full financial year, Rhodia earnings should be in line wi expected profitability objectives.

(1) On a comparable basis.
(2) Capital gains linked to Rhodia's listing restructuring provisions in the Pharma sector.
(3) Operating income before goodwill amortizat + equity in earnings of affiliated companies.

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RHÔNE-POULENC

ES C. COOPER & KATHLEEN MADIGAN

N'T BE FOOLED JULY'S WEAKNESS

lata aren't that soft. But the market's woes could spell trouble

S. ECONOMY If you're trying to get a handle on the economy's perfor- n the second half, here are some dos and don'ts: all, don't worry about the July weakness in em- nt, industrial production, car sales, and the like. a are either distorted by the auto strike and nomalies, or they reflect Asia-related weakness to manufacturing. Don't forget that the broad- ce sector is booming (chart).

owever, keep an eye on the stock market. That's , as was true in the first half, the second-half will be determined by domestic demand, not demand. A swooning market has the potential er consumer and business confidence and con- mestic spending, thus eroding the key prop un- economy in recent years.

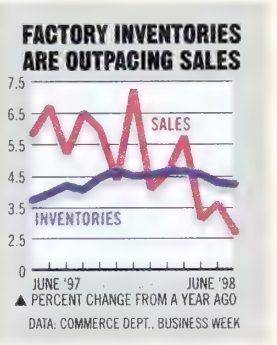
The Dow Jones industrial average has dropped 9% from its July 17 peak. Investors are increasingly nervous, especially that more Asian fallout on profits could be headed this way, given the deteriorating state of Japan's economy and a possible devaluation of the Chinese currency, both of which would only worsen the Asian situation.

problems also reflect rising labor costs at roductivity fell last quarter while compensation ted, resulting in another steep rise in unit labor hich are now increasing much faster than prices. Asia stabilizes in the second half, this drain on will not go away, and neither will the stock s cloud over the economy.

TE THE DOWNBEAT-LOOKING DATA of late, nomy began the third quarter on extremely oting. Although the July employment report d weak, closer scrutiny reveals little change nderlying trends of job gains, hours worked, ge growth evident in the first half. That's im- , because strong growth in jobs and wages has even more important driving force behind con- lemand than supportive financial conditions.

ie surface, nonfarm payrolls rose just 66,000 in e fewest in more than two years. But manufac- payrolls plunged by 176,000 workers, mainly because of the General Motors Corp. strike, while service payrolls rose by 229,000, showing no sign of slowing down, as strong domestic spending fuels the need for more workers at restaurants, banks, and consulting firms. Construction jobs rose by a solid 18,000. The jobless rate remained at a tight 4.5%, although it would have dipped to 4.4%, excluding the strike.

The Labor Dept. said that jobs in the auto industry plunged by 111,000. Labor identified 23,000 more workers in manufacturing industries, such as fabricated metals, rubber, and plastics, who were laid off because of the auto shutdowns, along with 7,000 temporary-help workers, who are categorized as service-sector employees. The Labor Dept. also said that there were other secondary losses that it could not quantify.



As a result, strike-adjusted payrolls increased by at least 207,000 in July—and probably more—so look for a huge rebound in August payrolls, with job growth in the neighborhood of 350,000. Moreover, excluding manufacturing, jobs in the other 85% of nonfarm payrolls increased by 242,000, almost no slowdown from the first-half average of 247,000 per month.

MANUFACTURING PAYROLLS also continue to feel the chill from Asia. Even without the strike, factory jobs would have declined somewhere near the losses of 29,000 in June and 22,000 in May. Part of that weakness reflected the need for manufacturers to adjust their inventories in the face of weaker foreign demand. Earlier this year, the rate of growth in factory stockpiles began to exceed that of shipments, suggesting that factory output may face continued downward pressure in coming months (chart).

However, strong domestic demand is keeping inventories in wholesaling and retailing in good shape. Shipments at wholesalers rose 0.3% in June, while inventories edged up just 0.1%. And despite weak July car sales, consumer spending began the third quarter on solid ground, as indicated by the upbeat July reports from chain stores. That suggests store merchandise isn't gathering dust on retail shelves.

The steep drop-off in car sales was expected. Total

ERIC HOFFMANN/BW

light vehicle sales fell to an annual rate of 14 million last month. Actually that's not bad, considering that May and June buying was boosted by generous dealer incentives, which lifted sales to 16.2 million and 16.5 million, respectively. Prior to May, sales averaged 15.2 million, and through July, sales are averaging 15.4 million, ahead of 1997's 15 million pace.

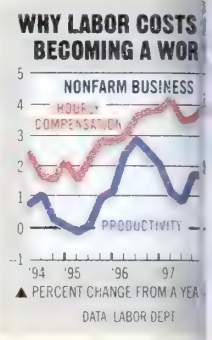
AUTO DEALERS AND OTHER RETAILERS don't have to fret about consumer spending until the job market turns sharply south and brings down income growth. For investors, though, the prospect of even higher wages has contributed to this summer's profit worries. That's because, so far in 1998, those fatter pay raises aren't being covered by productivity gains.

Output per hour worked at nonfarm businesses fell at an annual rate of 0.2% in the second quarter, after surging 3.5% in the first quarter. The productivity report also contained benchmark revisions for the past three years which showed that productivity in the 1990s is growing no faster than it did in the 1980s.

Over the past year, productivity is up 1.9%, which is a good clip, but hourly compensation has accelerated to a rapid 4.3% pace (chart). As a result, unit labor costs—the key determinant for prices and profits—are up by 2.4% from a year ago, significantly faster than prices are increasing. In fact, the ratio of nonfarm prices to unit labor costs last quarter was the lowest in five years, highlighting the growing squeeze on corp profit margins.

This vise is likely to tighten further since heavy demand means that wages will continue to accele For example, despite the absence of GM's hefty checks, overall hourly wages still rose 4.2% in from a year ago. That's up from a 3.6% pace in 1997. Service pay increased 4.9% last month.

Productivity growth, however, seems unlikely to catch up to those pay gains. Even with July's small job gain, the total number of hours worked in the economy began this quarter at an annual rate of 1.8% above their second-quarter average, and August hours are sure to surge as payrolls rebound from the strike. That implies that the third quarter's productivity gain will be small.



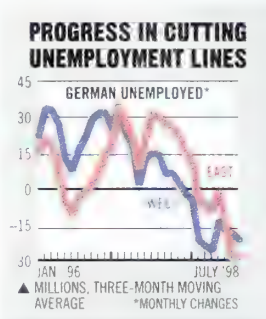
The tug on profits from Asia and rising labor have triggered the stock market's recent jitters. much more market turmoil households and busin can take before canceling that Range Rover ord postponing that big expansion project is still anyt guess. But if stock prices continue to sink, busine tivity could end up a good deal weaker this wint

GERMANY

KOHL'S ELECTION THREAT? THE JOBLESS

The make-or-break issue for Chancellor Helmut Kohl in the Sept. 27 elections is jobs. That's clear from the political jostling attending each new set of labor-market data. Kohl's government sees a turnaround. The opposition doesn't. And the data support both sides.

The July seasonally adjusted data, which are the only way to judge the month-to-month trend, showed a 37,000 drop in jobless workers, the seventh decline in a row, and the jobless rate dipped to 10.9%, a 20-month low. Since December's peak, unemployment in the west has fallen from 9.9% to 9.3%, and in the east, from 19.7% to 17.8%.



But while stronger labor markets in the west reflect a genuine economic recovery, lower joblessness in the east is largely artificial, reflecting the government's temporary job-creation and retraining programs. Spending on these has risen since March and will total some 40 billion marks this year. Such jobs jumped 18% in July, after rising 25% in June and 22% in May, with the greatest impact in the east. Economists estimate such jobs account for over half of 1998's 293,000 drop in total joblessness.

Still, the job-market gains in the west are not just preelection pump-priming. Overall German growth is expected at just under 3% this year, up from 2.3% in 1997. Second-quarter gross domestic product will slow, reflec the April rise in the value-add tax, but buying ahead of the V hike had boosted first-quarter growth to 3.9%. Also, Asian w ness is hitting manufacturing. June industrial output and ord were surprisingly weak.

However, the fundamental s ports under Germany's domest economy are strengthening, es cially given a break from the a tere fiscal policy that led up to the euro. Business investment picking up, fueled by strong p its and cheap financing. Consu spending is buoyed by rising r incomes amid higher wage pac and low inflation. The labor-ma ket recovery is a big reason fo the brighter outlook, but for th voters still out of work, it may too slow come election time.

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THE GLOBAL ECONOMY

NEW DAY, NEW RULES

The IMF wasn't designed to handle an Asian-style crisis. Something more is needed

ere is a simple lesson in the tur-
oil roiling the markets this Au-
ust. "Even the world's largest,
ost perfect economy is not insu-
ated from external shocks," says
. Jones, chief economist for New
urities trader Aubrey G. Lanston
We will pay a price."
nly question is how steep. Asia's
on helped clip second-quarter
o 1.4% and dimmed the outlook
ings. Now, with the Japanese
showing no sign of near-term
, the yen is racing toward new
eatening devaluations of curren-
n Beijing to Brasília (page 28).
the plunge in commodity prices
y Asia's problems has reached
merica, dampening the economies
o and Canada, whose currencies
pped sharply against the dollar.
s rising tide of woe, analysts are
ack earnings estimates for the
1998, markets are "correcting,"
nomists are assigning a higher
bility—though still low—to a
ecession within a year.

IGN. So while the U.S. remains
ie road to healthy, long-term
h, it could be a bumpy ride.
Mendelsohn, chief economist at
1 Imperial Bank, predicts that
1 crisis will slow global output to
year, down from a forecast in
r of 2.2%. If China devalues its
the world outlook will be grim-
warns: "The situation has dete-
and there is no sign of Japan
ut of this in the near term."
ch new convulsion from Asia
earer, the old institutions are ill-
to handle the problems of the
onomy. The International Mone-
d and its principal patron—the
asury—were slow to grasp the
of Asia's problems. And they
n largely ineffective in spurring reforms in countries such as Korea. In Tokyo, not even the fall of a government has persuaded Japan to clean up its banks and restore its economic health—which would be the best hope for reviving its neighbors' economies.

So what can policymakers do? At the very least, Treasury Secretary Robert E. Rubin and his counterparts from the major industrial countries—the Group of Seven—should keep the heat on co-member Japan to cut taxes and interest rates, sell bad loans to foreigners, and close insolvent banks. Rubin is sure to make his case when he meets new Japanese Finance Minister Kiichi Miyazawa on Sept. 4 in San Francisco. But the jawboning should not stop there. "The G-7 should exert as much pressure as it can on Japan," says Allen L. Sinai, CEO of Primark Decision Economics Inc.

BEST HOPE

What the U.S. shouldn't do is volunteer for a new yen rescue. Other G-7 nations must pressure Tokyo for real reform

What the U.S. should not do is volunteer for another yen rescue. Just eight weeks after a joint intervention by the U.S. and Japan that briefly drove the yen up to 136 to the dollar, Japan's failure to follow through on promised reforms sent the currency back to an eight-year low of 147 on Aug. 11.

The IMF, which was never intended to manage crises on Asia's scale, should get back to its original mission of providing short-term loans and leave negotiations on internal reforms—such as setting monetary policies—to political leaders. The rich countries provide the IMF money in the first place, so they should set the rules for how it is spent and be accountable for the social unrest their policies may cause.

The Federal Reserve has already played a vital role by considering the state of the global economy—not just the U.S.—in setting monetary policy. The turmoil in Asia is the main reason Fed Chairman Alan Greenspan has resisted calls to hike rates. With the Dow Jones industrial average on Aug. 12 down 8.4% from its July high, Greenspan should breathe a little easier about overvalued stocks. In fact, many economists think a rate cut might be the next move—to keep the U.S. expansion going and buoy Asia's currencies by making dollars less attractive. "The Fed has to be careful not to fight the last war," cautions former Fed Vice-Chairman Manuel H. Johnson Jr. "It should lean toward easing."

FREE FLOW. But these are stopgap measures. If the U.S. and other nations are to reap the full rewards of the global economy, they'll need better safeguards to make sure one country doesn't pay a heavy price for another's mistakes in the future. That will require the G-7 to take on a new role as an advance warning system for financial trouble. Nations that want to benefit from the free flow of capital or need financial help from the G-7 should be required to open their books. The G-7 should also develop clear guidelines for conditions on IMF loans.

If there is a lesson as we move into the 21st century, it's that no economy is an island unto itself. If nations are to prosper together, they're going to have to pull together.

By Owen Ullmann in Washington

THE GLOBAL ECONOMY

THERE'S NO WISHING THIS CRISIS AWAY

Quick fixes won't work, and Tokyo is barely on the case. Now, the yuan is teetering

The yen plunges to an eight-year low as Japan faces its worst recession since World War II. Hong Kong stocks dive as speculators attack its currency and rumors spread that China will have to devalue the yuan. Russian bonds reel on fears of loan defaults. Even in North America, Mexico and Canada see the value of their currencies plunge.

Time to worry about a global panic? Not yet. Only under the most pessimistic scenarios, economists say, would the Asian depression and spreading commodity deflation push the healthy economies of the U.S. or Western Europe into recession. And, while suffering, both Canada and Mexico are in better financial shape to withstand external shocks than they were five years ago.

But each new Asian devaluation makes the crisis more global. Each new setback to an International Monetary Fund rescue plan fans fears that no emerging market, no matter how well-managed, is safe for investors.

The effects on the U.S. economy, once theoretical, are becoming tangible. U.S. exporters are hitting a wall not only in Asia but also at their own borders. Asia's turmoil has led to sharp drops in prices for oil, metals, timber, and other commodities. That is hurting the Canadian dollar and the Mexican peso. Canada and Mexico are the two biggest markets for U.S. exports, absorbing $223 billion in goods in 1997, but now their buying power is down sharply.

Unless Japan takes dramatic action soon, far worse is in store. Despite ing setbacks at the polls, Japanese ers still have not come to grips their crisis. A U.S.-Japan interven June only produced a pause in the slide. A collapse of the yen to 2 worst-case scenario but by no implausible—would hit currencies wide and further depress pric would also make Japanese goo cheaper and lead to steep sales d for many American manufacturers, ing the U.S. into recession in 199

CHINA WATCH. On Aug. 11, Tokyo vened to prop up the wobbly yen, then stood at 146 to the dolla Westerners should have no illusion this is the beginning of the end of decline. It is all but certain tha crisis will menace the global ec for the next three to five years. E Japan gets serious soon about ta its banks' $600 billion in bad deb cleanup will be protracted and h expensive. "As long as the financi ficulties continue, you will see th get weaker and weaker," says M Yoshitomi, vice-chairman of the search Institute of the Long-Term

of Japan. Most private econo-
ink the economy will contract by
s year and by 0.5% in 1999.
's complacency is crushing its
's. Last fall, they were counting
ost from the world's second-
economy. Instead, the region is
for more devaluations.
es are on China. Even though
keeps insisting it won't devalue,
wonder how long it can hold
na would be hurt by a cheaper
ce many of its exports rely on
d components and machinery.
Shanghai's black market, the
w sells for around 8.8 to the
3% below the official rate.
lownward pressure is building
h internal problems and trade
hina's shipments to the U.S.
18% this year, but overall ex-
e up only 7% due to slumping
es. China has lost ground to
orea in steel, coal, and chemi-
jing University economist Song
sees a 90% chance China will
within two years. "In the long
quite sure there will be a large
ion, maybe 20% to 30%," he
so, expect a Hong Kong deval-
follow.

Such talk is making stomachs turn in markets around the world. Another round of devaluations could capsize currencies in Latin America and Eastern Europe. Declines in commodity prices will sting as well. Oil is already off 30% since last August, to around $13, and an Asian depression could push prices down to $9 by the end of next year, estimates Standard & Poor's DRI. Such price collapses are hurting economies around the world. In Russia, rumors of a possible ruble devaluation on Aug. 11 sent stocks plummeting.

The picture is just as ugly north of the U.S. The global commodity glut has hurt Canada's mining and timber industries, about 10% of the economy, and falling investment from Hong Kong has halted a property boom. Canadian stocks are down 17% in the past year, and the dollar is off 8.5%, to 65.7 U.S. cents.

DISTANT RIPPLES. It may be America's turn next. Early this year, only exporters such as Boeing Co. and Hewlett-Packard Co. felt the pinch. Now, companies with minimal exposure to Asia, such as Hershey Foods, blame lower expected profit growth on weakness in that region. "In the next couple of quarters, you are going to see obvious signs of slowing down," predicts Merrill Lynch & Co. global strategist Jeff Bahrenburg.

What could change the scenario? A new approach by Tokyo would help immensely. Optimists believe Japan still can reverse the direction of the yen by unveiling a convincing plan to close weak banks, clean up bad debts, and inject massive liquidity into the economy. The yen would then rebound, and Asian currencies would rise as well. That would bring foreign investors back to the region, allow Asian banks to lower interest rates, and restart growth.

As Asia's ordeal drags on, however, fewer analysts believe it can be resolved so easily. Still ahead are the tortuous tasks of overhauling the region's banking systems and securing public support for taxpayer-funded bailouts.

"These are serious and deep-seated problems," says Gregory B. Fager, Asia director for Washington's Institute of International Finance. "Many investors seem to have lost sight of that." Bulls would like to believe the roller-coaster ride is nearing its finish. Instead, they could be in for many more nasty jolts.

By Mark L. Clifford in Hong Kong and Pete Engardio in New York, with Brian Bremner in Tokyo, Dexter Roberts in Beijing, Joseph Weber in Toronto, and bureau reports

COMMENTARY

By Suzanne Woolley

DON'T CRY, IT'S ONLY DEFLATION

Remember the good old days—a month or two ago—when the economic troubles roiling Asia seemed to be only a distant threat, maybe even a timely brake on an overheating economy? Well, it's no time to dwell on the past. Suddenly the prognosis for the immediate future has changed: The deepening Asian crisis now seems far more likely to spread, bringing its deflationary spiral to the U.S. economy.

What does that mean for equity investors? Deflation itself doesn't necessarily sound a death knell for stocks. Indeed, falling commodity prices have helped many corporate bottom lines, headed off inflation, and prevented a rise in interest rates. But if deflation persists and spreads across a wide swath of the economy, the scales could tilt: Profit growth would slow, making today's most pessimistic earnings projections too rosy—and stock market valuations too high. That's part of the reason behind the recent drop in bullish sentiment on the Street (chart).

ATTRACTIVE BONDS. So it's a good time to rethink investment strategies to take into account the possibility of pervasive deflation. In equities, the fallout will vary from industry to industry depending on whether companies export to Asia and how exposed they are to commodity prices. Deflation could, however, make bonds far more attractive than equities over the next year.

Even if the August currency scare subsides, it won't be the end of deflationary pressures. China may devalue its currency in 1999, a move that could spark a string of devaluations and bring Asia's woes to U.S. shores. For Corporate America, the ensuing deflation would mean falling profits and the risk of being stuck with overpriced inventory.

Commodity deflation has become alarming. The Goldman Sachs Commodity Index has fallen about 27% year-to-date and 35% in the past 12 months. A major index component, crude oil, has fallen 26% since Jan. 1 and plunged 7.5% in just two days, on Aug. 10 and Aug. 11. Aluminum is down 14.9% this year.

MARKET PAIN

Falling prices for commodities and devaluations of currencies may threaten growth

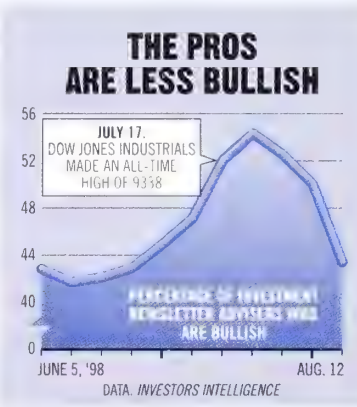
Now deflation is spreading. Ford Motor Co. announced on Aug. 10 that the average sticker price on 1999-model cars and trucks in the U.S. would be 0.3% lower than on its 1998 models, its first fleet-wide price decrease in more than 30 years. Ford is making major productivity improvements, but not every company will be able to offset price cuts. Says Gerald A. Guild, chief taxable fixed-income strategist for Advest Inc.: "No one focuses on how widespread an effect the Asian deflation could have on our economy."

James W. Paulsen, Norwest Investment Management's chief investment officer, says he still views the low interest rates that deflation brings as a bull market savior. But he concedes that he worries a little about what he calls "depressionary fallout." He believes parallels can be made to the 1920s and 1930s, when the Federal Reserve tightened and foreign trade was closed down. As Asia weakened last fall, he notes, central banks tightened from Hong Kong to Canada. And in the U.S., "the Fed allowed rates to stay put and in real terms tightened." Paulsen says that while specific barriers to trade don't exist today, "trade is being effectively shut down because the only rising currency in the world is the dollar."

INFLATED HOPES. Investors who don't want to figure out how deflation will affect earnings are wisely flocking to bonds. Advest's Guild recommends zero coupon bonds as an equity substitute for investors expecting interest rates to fall. A 20-year zero "will appreciate about 30% in a year if interest rates decline 100 basis points," says Guild. As long as people are willing to hold to maturity, he likes "guaranteed" certificates of deposit that promise no set return but pass along 100% of whatever a particular stock index returns over the life of the CD.

William H. Gross of Pacific Investment Management Co., who thinks the Fed will lower rates before yearend, recommends intermediate-term bond funds. Prices on intermediate bonds typically rise more than long bonds when the Fed cuts rates, he says. He suggests a government fund, since "its yield won't rely on the confidence of investors in Corporate America."

Deflation doesn't mean the bull market is over. It does mean, however, that equity investors may have to resize their inflated expectations.



Woolley covers the financial markets.

MACEUTICALS

RCK'S NEW ANCHOLY BABY

word on the latest antidepressant is creating a stir

long time, it looked like a blind . Pfizer, Eli Lilly, Warner-Lam-, and others had been trying 's to come up with painkillers ck the action of Substance P, a nsmitter that conveys pain mes- The hope was that by blocking ptor on a cell's surface where ce P attaches, they could block ssage and stop the pain. But the compounds tested so far vered much relief.

ns out the scientists may have using on the wrong kind of pain. Co. is now in Phase II clinical f a new antidepressant that by blocking Substance P and publish data on its research in nal *Science* by mid-September. researchers have already said ound is as effective as the pop- ss of antidepressants that in- rozac, with fewer side effects. Certainly, Merck's drug may ut it could en up the w approach ing depres- ice Prozac in the late If the data pressive as say it is, a remark- akthrough," Charles B. f, chairman y Universi- ol of Medi- partment of ry and be- sciences. s are not for Merck em how re- e the new . At least panies are ng Sub- P blockers ssible use conditions chemother- ced nausea ma. Mean- Pfizer and Novartis are studying Substance P blockers for psychiatric disorders—where financial gain could be biggest (chart). Market researcher IMS Health Inc. estimates that antidepressants are a $5 billion market in the U.S. alone. Says Merrill Lynch analyst Steven C. Tighe: "If it truly is superior to existing antidepressants, then you could be looking at multibillion dollars in potential revenue."

Researchers at Merck are almost giddy over the possibilities. While the company declines to comment until the *Science* article is published, research chief Dr. Edward M. Scolnick told analysts last December that based on a six-week study involving 210 patients, the Substance P compound appears to be as effective as the widely used selective serotonin re-uptake inhibitors (SSRIs), which include Prozac. At a recent meeting in Glasgow, Merck researchers said the Substance P drug appears to have a lower incidence of some of the pesky side effects of SSRIs, such as sexual dysfunction.

Substance P has been frustrating researchers for decades. This snippet of protein was discovered in 1931 by scientists studying tissue from horse brains and intestines. It wasn't until 1971 that researchers were able to produce it in pure form. Another 20 years passed before Pfizer created an effective blocker. Why so long? Scientists found that would-be blocking compounds were broken down by enzymes in the body or couldn't get through the barrier from the blood to the brain.

Despite Pfizer's breakthrough, Substance P blockers have been ineffective in preventing pain. Allan I. Basbaum, chairman of the department of anatomy at the University of California at San Francisco, says Substance P appears to relay only certain intense pain messages; it may have little involvement in more moderate pain.

"A SHOCK." Until Merck's announcement last year, there had been little work done on Substance P and depression. While Substance P is found in parts of the brain believed to be involved in anxiety and mood regulation, there were few signs that it had a major role in causing depression. For now, Merck won't say why it started looking for a link. "I think [Merck's work] came as a shock to everyone in the field," says James E. Krause, a vice-president at competitor Neurogen Corp.

Merck's compound still faces plenty of hurdles. Unexpected side effects can often develop as proposed drugs are tested on larger numbers of patients. But the drug industry is buzzing with the hope that this latest twist in the Substance P saga won't turn out to be another dead end.

By Amy Barrett in Philadelphia

BEYOND PROZAC

Several companies are racing to develop a new class of drugs that block Substance P, a neurotransmitter that may be a factor in depression and other psychiatric conditions.

MERCK In Phase II clinical trials with a Substance P blocker for the treatment of depression. Other possible applications: schizophrenia, anxiety, and bipolar illness

NOVARTIS In early trials of a compound that could be used to treat a variety of medical conditions, including some psychiatric disorders

PFIZER In Phase II clinical trials for a Substance P drug for the treatment of chemotherapy-induced nausea. Also doing preclinical work on Substance P compounds for psychiatric applications

DATA: COMPANY REPORTS, COWEN & CO.

AUTOS

BIG CAR ON CAMPUS?

Daewoo pays college students to hype its cars in the U.S.

They're young. They're enthusiastic. And they're in for a tough time. They're the Daewoo Campus Advisers, an army of 2,000 college students hired to create a buzz among their classmates about cars never seen before in the U.S.

They're from Korea's Daewoo Motor Co. Daewoo has been aching to crack the U.S. market for years, but the closest it has come until now is building the Pontiac Lemans for General Motors in the early '90s. Now, on Sept. 1, it's taking the plunge on its own. Daewoo hopes to sell 30,000 vehicles in its first year, just under the number of Beetles Volkswagen plans to sell. Problem is, these are no Beetles. Or Toyota RAV4 sport-utes, or Honda Civic coupes, the "in" cars of the campus crowd. They are three conservatively styled sedans. "Gen-Xers are very aware of the image their cars project," says Wesley R. Brown, an analyst at market researcher Nextrend in Thousand Oaks, Calif. "Daewoo is not going to measure up."

So Daewoo is taking extreme measures. For starters, it's not franchising dealers but opening its own stores, as it has done in Britain. Daewoo will start with 15 outlets, mostly in California, Florida, and the Northeast. It aims to have 40 by the end of 1999 and will add dealers only in states where factory stores are illegal.

THESIS: *Clewett in the Leganza*

The Daewoo Campus Advisers, deployed at some 200 campuses this fall, will be talking up the cars, running Daewoo events, and directing hot prospects to the nearest Daewoo showroom. There, customers will find three aggressively priced models, from the $8,999 Lanos hatchback, to a Nubira compact around $12,000, to a loaded Leganza sedan at $18,600. The non-negotiable prices include roadside assistance and three years of maintenance. Says William D. Tucker, vice-president of marketing and customer relations for Daewoo Motor America Inc.: "We felt we had to come up with a way to approach the market that was totally unconventional."

KOREA CALLING. That's where the student advisers fit in. They get a straight commission of $300 to $500 per car sold, depending on the model, and also receive an all-expense-paid seven-day junket to Korea. In September, each will get a car to use for three months free and the chance to buy it at a discount. "What they're doing is unique and exciting and a chance to earn some extra money," says David W. Clewett, a part-time MBA student at Loyola Marymount University in Los Angeles and a Campus Adviser. "It could make a good thesis project."

Daewoo hopes the undertaking turns out to be more than an academic exercise. With the Korean economy ailing, its car sales at home are off 69% through July. "We've got plenty of cars," Tucker quips. Its prospects are mixed, but Daewoo has little choice but to give it the old college try.

By Larry Armstrong in Los Angeles

Gen-Xers may not rush to buy these conservatively styled sedans

SOFTWARE

NOVELL HAS TO HIT THE GAS

It needs some hot produc to outmaneuver Microsof

It has been a busy year fo Schmidt. Since taking the h Novell Inc. in April, 1997, t mer top technologist at Sun Mi tems Inc. has logged 250,000 meeting customers and promoti ailing software maker. He recrui all-star board and set up a $50 fund to invest in software startu slashed expenses, refocused No networking, and pushed new pr out the door—including NetWar major update of the company's co work operating system.

An enviable record, especially the mess Novell was in when S arrived. But the hardest part lies He has pushed Novell into the by trimming costs, but revenues been nearly flat, thanks to inroa Microsoft Corp.'s Windows NT, has built-in networking feature Aug. 20, Novell is expected to an earnings for the quarter ended J of about $25 million—its fourth consecutive quarterly profit and a nice comeback from the $121 million loss last July. But analysts expect nearly flat revenue, at about $275 million (chart, page 34). For the fiscal year ending Oct. 31, sales are expected to reach $1.09 billion, up 8% from 1997 but 21% below 1996 levels.

CEO SCHMI *He'll have do more th cut costs*

NET PLAY. The lack of revenue growth is reflected in Novell's stock. While other networking co nies—especially those associated the Internet—soar, Novell's stoc tumbled. At around 10, it's 26% its 52-week high. The market still seen Schmidt deliver on a goal h when he joined Novell: to turn the pany into "a pure-play Internet a tranet company."

Schmidt is counting on NetWa which will begin shipping in Sep

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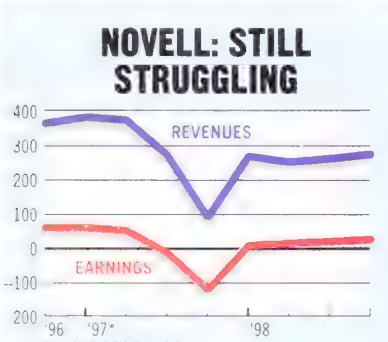
ber, to carry Novell into the Internet Age. The company's most important upgrade in four years, NetWare 5 is built entirely on Internet standards, allowing customers to mesh their corporate networks with the public Net.

With those features and favorable reviews, it's likely that many Novell customers will buy the upgrade. And Novell may get a boost from Microsoft: Its competing NT 5.0 has been beset by delays and appears unlikely to ship until late 1999—years behind schedule. That has prompted some consultants to warn customers against buying NT 5.0 until 2001. "Novell has a great window of opportunity," says Mary McCaffrey, an analyst with BT Alex. Brown Inc.

INERTIA. Novell has already proved a hard competitor to unseat. Though sales of Windows NT passed NetWare for the first time last year, Microsoft has found it hard to cut into Novell's existing base of 80 million customers. "Novell is like an old pair of shoes," says Jon Oltsik, a Forrester Research Inc. analyst. "You think you're going to get rid of them, but they're comfortable and it's too much trouble to buy a new pair."

Such inertia can keep Novell coasting for years. But to grow, it must attract new business. Schmidt hopes NetWare 5 will do the trick by generating sales of other new products, such as Border-



Manager, which manages connections between a company network and the Internet, and Z.E.N.works, a network-management package. "We were playing catch-up," says Schmidt. "Now you can judge us as an Internet player."

Wall Street is not yet convinced: Novell's $3.5 billion market cap pales next to that of hot Net players such as Yahoo!, which, with just $67 million in sales last year, has a giddy $8 billion valuation. Schmidt has many more miles to go before he proves that Novell is really an Internet highflier.

By Amy Cortese in New York, with Andy Reinhardt in San Mateo

THE INTERNET

NOW ANY HACK CAN BE A HACKER

A bit of free software is giving computer-security experts fits

Just when computer users are recovering from scare stories about security holes in E-mail programs—and suppliers are finishing fixes to plug them—here comes an even more worrisome problem. On Aug. 3, a hacker group known as the Cult of the Dead Cow began distributing Back Orifice, a program that can wreak havoc on PCs running Windows 95 and 98. Once installed, the software makes it possible for an outsider to see what's on the screen, read keystrokes (passwords or credit-card numbers, for example), and install or delete programs. So far, the group claims 50,000 copies of the free program have been downloaded from its Web site. "This is a breath-taking tool," says Susan B. Levy Haskell, a computer security manager at the University of Minnesota. "It's going to nail Corporate America to the wall."

Worse, it's a breakthrough in easy-to-use hackware. Computer-security experts say the software is as simple to use as any Windows program and turns the novice into an instant—and potentially dangerous—hacker. That raises concern that insider attacks, which already account for some 70% of computer crimes, could become far more likely. "You've just made a lot more people capable," says Patrick Taylor, director of marketing for Atlanta-based Internet Security Systems Inc.

"SUBSTANTIAL DAMAGE." What's behind this nefarious development? The Cult of the Dead Cow says that it released Back Orifice to raise awareness about security problems with Microsoft Corp. programs. "Back Orifice will force Microsoft to sit up and take notice," says Deth Veggie, a member of the group who says his real first name is Luke.

Microsoft is taking the program seriously. The software giant has 300 employees trying to secure all its software products and is working with security companies to devise ways to detect the Back Orifice software. As Edmund Muth, Microsoft's product manag security, concedes: "This is the k software that could produce ver stantial damage to someone's con if it were installed."

And installing this software is difficult. Computer security exper the program—which is remar tiny—can be hidden within an a ment to an E-mail message. On unsuspecting recipient clicks on th Back Orifice installs itself and can transmitting information back t sender.

Various security holes—includi recently disclosed problems with

DEVILISHLY EASY

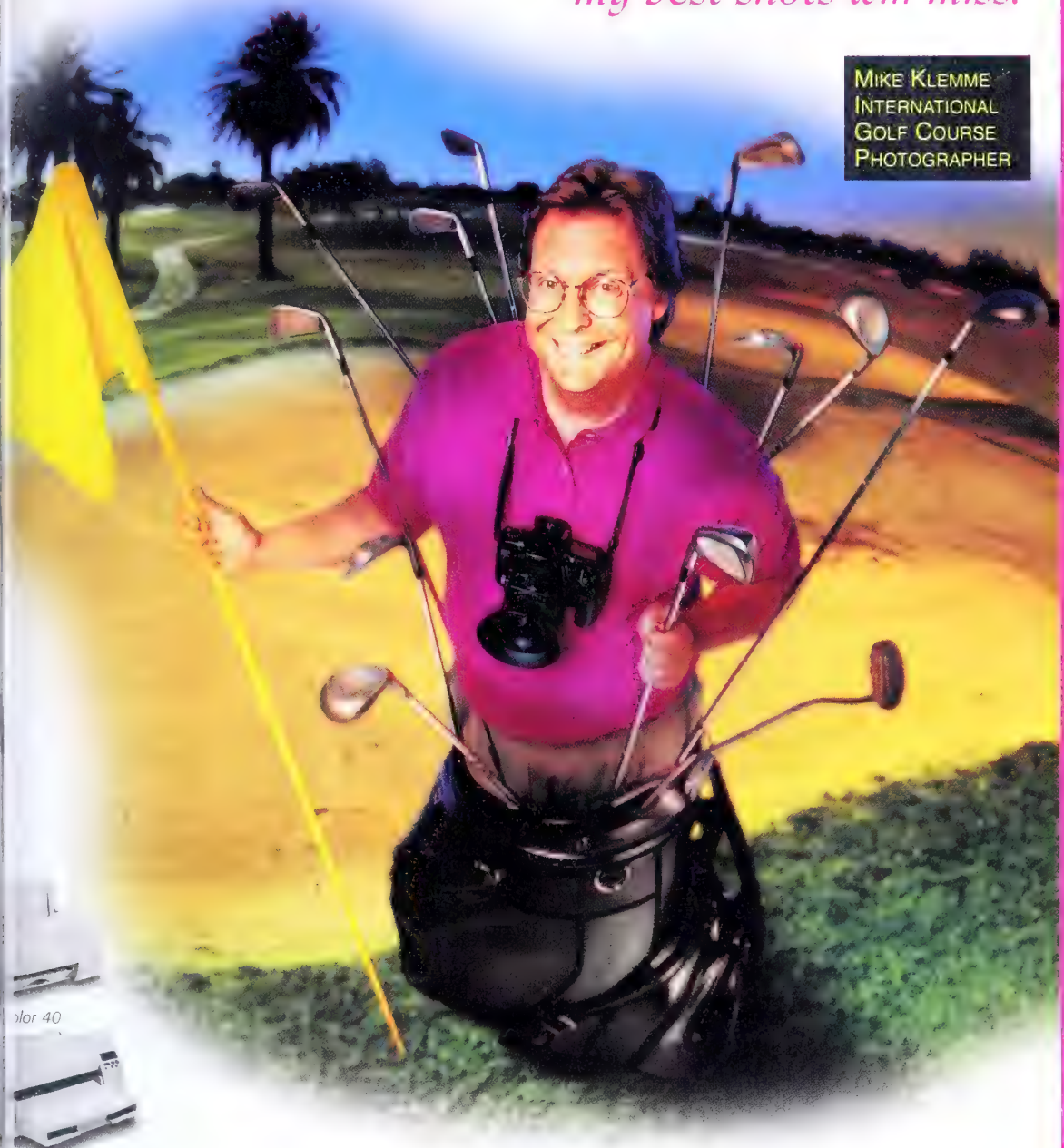
The program can instantly turn a novice into a dangerous spy

programs from Netscape Commu tions, Microsoft, and Eudora—car be used to sneak the software o machine. Experts say that soft patches released to fix bugs ir E-mail programs, for example, wil vent hackers from exploiting the grams' flaws to install Back Orifice they warn, many companies are to incorporate software fixes, while ers ignore updates altogether. "Hov get this installed is actually quite says Drew Williams, manager o InfoSecurity SWAT team for Axent nologies Inc.

Computer-security companies ar veloping antidotes. The program c detected by scanning computers communications line that may be and sending data. Regardless, ex warn that it's dangerous to open E from people you don't know. "If I know what it is, I don't open it," Charles C. Palmer, manager of network security group. For now, may be the best safeguard.

By Ira Sager in New

"A color printer has to have great resolution – or even my best shots will miss."



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COMMENTARY

By Joseph Weber

CANADA'S HEALTH-CARE SYSTEM ISN'T A MODEL ANYMORE

They are tales of a health-care system gone awry: A 10-year-old boy, Jean-François Giguère-Bélisle, died in June, 1997, after his ruptured appendix went undiagnosed in two clinics and an emergency room. Jeyaraanie Kaneshakumar, 35 and pregnant, succumbed to a brain hemorrhage last fall after doctors couldn't find a neurosurgical facility that had room for her. Last September, Frances Lever, 49, died after her stomach pains, allegedly misdiagnosed after weeks of cancelled appointments, turned out to be cancer.

HMO horror stories? Not this time—these patients died in Canada. With its free care for all citizens and relative lack of bureaucracy, Canada's "single-payer" national health system has been proffered as the antidote to for-profit managed care, which has left more than 40 million people in the U. S. without medical insurance. But Canada's government-run complex is also growing distinctly unwell.

SQUEEZE. Federal and provincial governments are grappling with the fiscal duress caused by the near-tripling of real public-health spending from 1980 to 1990. Since the system sets no limits on demand, patients seek as much care as they can get, driving up costs. That has helped push total government debt to 90% of gross domestic product, vs. 45% in the U. S. Bureaucrats have had to ration supply by shutting hospitals, reducing medical payments, and limiting the hours doctors can spend in surgery.

As a result, service has plummeted, and physicians and patients are steaming. From Montreal to Vancouver, doctors—whose pay has barely budged since 1993—have staged or threatened job actions this year. On July 30, physicians across British Columbia shut their offices for five days and pledged to repeat the protest monthly. Virtually all obstetrician-gynecologists in Alberta, furious at the paltry $185 cap on the fee for a delivery, warn that they will opt out of the state system, forcing patients to pay for services. Critics charge that hospital closures have led to the deaths of patients who have been turned away from jammed facilities. And waiting lists for common procedures, which have always been protracted, have stretched even longer.

Patient Patients

Median wait, in weeks, for specialist care in Canada

OPHTHALMOLOGY	24.6
ORTHOPEDIC	20.7
CARDIOVASCULAR (BYPASS)	18.2
NEUROSURGERY	16.5
OTOLARYNGOLOGY	12.2
GYNECOLOGY	11.6
INTERNAL MEDICINE	7.8
GENERAL SURGERY	7.1

DATA: FRASER INSTITUTE, 1997

So as flu patients lie queued up on hospital gurneys and as some cancer patients wait more than two months for radiation treatments, critics argue that American-style, market-driven medicine may not be such a bad thing. Keep universal coverage, they say, but let Canadians pay for care if they want. "Create competition...and if the private sector performs better, then people will flock to it," says Dr. William J. McArthur, a fellow at the market-oriented Fraser Institute, a private think tank.

Supporters of the status quo worry that partial privatization will provide good care for the rich while shunting the poor to crowded, lower-quality facilities. Besides, most Canadians, who see universal health care as part of the national identity, "are very clear that they don't want an American system," says Hugh Armstrong, a professor at Carleton University School of Social Work.

FREEDOM TO CHOOSE. There are signs that market reform is inevitable. The Alberta government recently won a compromise allowing patients to go to private clinics for cataract surgery. Quebec's Institut de Cardiologie de Montreal wants to sell heart surgery to Americans. And in Calgary, private Health Resource Group Inc. has invested $2 million to refurbish a former government-funded hospital to serve third-party insured patients—typically, expatriates—and those covered by worker's compensation. "I want freedom for people to choose," says Dr. Stephen D. Miller, Health Resource's co-founder.

PRIVATE PRACTICE

Health Resource Group's Miller wants to move beyond the government system

In the best of worlds, institutions would serve any Canadian with the means to pay. The poor and people with catastrophic ailments would be protected by requiring doctors who see paying patients to work in the public system as well. But first, argues medical student David Gratzer, a well-known critic of the system, "there has to be a recognition that something is wrong."

Americans might consider that as they look longingly north. Universal health coverage is an admirable intention. But a hybrid system that allows some competition may produce better care and lower overall cost—a model truly worth emulating.

Weber is BUSINESS WEEK's Toronto bureau chief.

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EDITED BY KELLEY HOLLAND

BILL GATES'S COURTROOM DRAMA

HERE'S AN ALTERNATIVE TO Monicagate for TV pundits: How about dissecting Bill Gates's performance on tape when he testifies in the federal antitrust case against Microsoft? On Aug. 11, Judge Thomas Penfield Jackson ordered that court be open to the public—and possibly televised—when Gates and other Microsoft execs testify. Company lawyers are appealing the ruling with the U. S. Court of Appeals for the District of Columbia. Microsoft is proposing that the executive depositions be videotaped while the company and Justice argue over whether the tapes should be aired publicly. Microsoft's move makes it almost certain that the Sept. 8 start date for the trial will be delayed.

CLOSING BELL

THE GREAT 'SCAPE

For Internet stocks, it has been a sizzling summer. But for Netscape Communications, which traded as high as 44 in early July, the weather has been unseasonably cool: By early August, its shares were below 25. All that changed on Aug. 10, when Netscape soared 24%, to 31 1/16, as the market was drifting down. The news: Netscape hired former Oracle executive Barry Ariko as its chief operating officer. Next, analysts expect a lift from new channels on Netscape's Web site.

DATA: BLOOMBERG FINANCIAL MARKETS

IS BURMA TOO HOT FOR ARCO?

ARCO, ONE OF TWO AMERICAN oil companies doing business in Burma, said on Aug. 11 that it plans to get out. It says new priorities after its $3.3 billion acquisition of Union Texas Petroleum made it decide not to renew its oil exploration lease. But Simon Billenness, senior analyst at socially responsible investment firm Franklin Research & Development, argues that shareholder pressure to stop doing business with Burma over human rights concerns "simply wore down management." Arco had spent about $50 million on two offshore wells. The move makes Unocal the last big U. S. investor in Burma.

CHECKFREE TAKES A BAD BOUNCE

SHARES OF CHECKFREE HOLDings dropped 41% on Aug. 12 after the home-banking service provider warned analysts that fiscal 1999 earnings would be 12¢-16¢ a share, half what they had expected. CheckFree said subscriber growth in fiscal 1999 will be 4% to 6%, not 8% to 10%. Why the changes? Banks are delaying marketing independent online banking services such as CheckFree while they promote their own Web sites. Also, bank mergers such as the pending combination of Wells Fargo and Norwest are slowing the growth of online banking. Finally, analysts say CheckFree faces intensifying competition from Microsoft and First Data.

BIG BLUE VS. THE MUSIC PIRATES

A COUPLE OF YEARS AGO, IBM had a bright idea: a system to protect electronic "content" such as magazine articles from illegal copying. It didn't catch on. Now, Big Blue has a similar idea for the music business, which is sending out more product online these days. IBM is in talks with companies including Sony Music Entertainment and Time Warner to supply software to distribute music over the Internet. The system is designed to let consumers sample music while preventing piracy or unpaid copying. IBM plans consumer tests before releasing the software. InfoMarket, the earlier IBM service for selling publications on the Web, flopped and was sold.

HEADLINER: WILLIAM McGUIRE

HEADACHE AT UNITED HEALTHCARE

United Healthcare CEO William McGuire seemed immune to managed care's woes. But after a surprise $900 million write-off that quashed its deal to buy Humana, the physician-turned-exec is struggling to regain investor confidence. "Bellwether stocks are not supposed to do this," snaps Merrill Lynch analyst Roberta Walter. She thinks it will take a year of solid earnings to restore the stock, off 34% since the announcement on Aug. 6.

What really peeved investors—and shocked some directors—were problems in what they had been told would be a growth area enrolling Medicare patients. McGuire admits underestimated the c plexity and cost the business. A there will be larger-than-e pected charg for a planne restructuring "There's no qu tion about hum ty," says McGuire. Apart from the interr problems, one director s there had "certainly bee some mixed feelings" ab the need to do the Hum deal. McGuire insists th charges were not aimed sabotaging it, but says United is "better off" cleaning house first.

By Richard Melc

KERKORIAN: FEED MY LION

IS METRO-GOLDWYN-MAYER ON the block? Insiders say billionaire Kirk Kerkorian, who owns 65% of the company, is tired of pouring money into MGM, which wrote dow million in its most re quarter for such loser *Species II* and *Dirty* But Kerkorian may simp looking for a partner i deep pockets and TV dis ution. Former Chrysler Jerome York, who Kerkorian's holding comp Tracinda, has already ta with Time Warner and Corp. about supplying infusions in exchange fo use of MGM's hefty film TV library.

ET CETERA . . .

- British Telecom is bu MCI's 24.9% stake in Con their joint venture.
- Cendant announced p to sell classified-adverti and software units.
- Community spirit: E is launching tools to con like-minded Net surfers
- Sumitomo will pay $99 lion to settle six class act relating to copper losse

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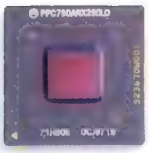

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Processor Speed Comparison

iMac G3 / 233

Pentium II / 400

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rDisk), scanners, joysticks, digital cameras and more.

d unplug all you want—no restarting necessary.

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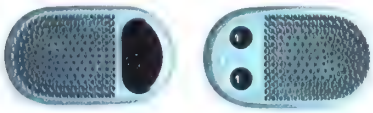

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The Entrepreneur. *Gets the best of both worlds: the ability to run all the advanced Macintosh applications, plus the option to open Windows files (or even run Windows applications, if need be) by day. His work can be done from the office. Not-so-secretly dreams of chucking the office altogether to start an internet-based home business selling bicycling paraphernalia on the web.*

The Grandma. *Shares Dr. Seuss and Curious George CDs when grandkids are in town and—using e-mail—stays wonderfully close with them when they're not. Orders hard-to-find gardening books online. And uses Mac landscaping program for everything in the garden from plant selection to predicting shadow patterns—before ever putting trowel to earth. In charge of creating garden club newsletter.*

As gardener: 3D Landscape
Adobe PageMaker
As grandma: Internet
Explorer, Outlook Express

The Player. *Currently in 23rd day of an internet MiniZork game with best friend Rudy, who moved 1000 miles away. Hones his gaming chops online at gamespot.com. Went from a B- to an A on his latest book report by adding eye-popping graphics (and making liberal use of the spell checker).*

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re MathStory
ing Fugata Pro

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The Music Maker. *Hasn't set foot in a music store since starting to preview and buy low-cost CDs online. Cataloged her entire music library, cross-indexing by artist, genre and coolness factor. Augments her high school music studies by hooking synthesizer to iMac to compose and edit scores. Plans to tour with Lilith Fair in 2004.*

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TED BY OWEN ULLMANN

ONORGATE: WHY ANET RENO CAN'T WIN

rom her first days as Attorney General, when she took responsibility for the Waco debacle, Janet Reno has been a political untouchable. White House aides can gripe that not a team player and has been too quick to seek indelent counsels. And Capitol Hill Republicans can dub her newall Reno" for resisting pressure to appoint a special ecutor to investigate the curious fund-raising of the Clin-Gore campaign in 1996. But all that sniping just bounces Reno's back. Or did. Now her charmed political career may ver.

BI Director Louis J. Freeh and Charles G. ella, the Justice Dept. prosecutor investiag alleged campaign-finance abuses, are calling for the appointment of an indelent counsel. Caught between an increasy hostile Republican Congress and an insingly worried White House, Reno is in a -lose situation.

'ES OUT. The Attorney General, who earthis year declared that there was insuffit evidence to warrant an independent e into '96 fund-raising, is reviewing new rmation uncovered by LaBella's task force has promised a decision by the end of Au-. That gives her an opportunity to exe- a political pirouette—something that y legal experts expect her to do. But tever option Reno chooses, her mystique ndependence is sure to be damaged. "She's in a tough sit-on," says American University political scientist James A. rber. "She may have to tap her reserve of support among American people."

he stakes are enormous for President Clinton and even ier for Al Gore. In fact, the Vice-President's political fu- may hang in the balance. An independent counsel with e latitude could target Gore for making '96 fund-raising from his office or for collecting questionable contributions at a Buddhist temple in California. Such a probe—even if it ultimately uncovers no wrongdoing—would cast a shadow over Gore's 2000 Presidential bid. It would also hamper his fund-raising and encourage reformers such as former Senator Bill Bradley (D-N.J.) (story below), Senator Bob Kerrey (D-Neb.), and Senator John Kerry (D-Mass.) to seek the nomination. That might lead to a messy primary battle that rehashes previous campaign abuses and hurts Gore's general election prospects if he does win the nomination.

HER CALL: *Reno, with Freeh*

Republicans are clearly relishing the possibilities. That's why they'll be furious if Reno just says no—or authorizes a limited probe that doesn't zero in on Clinton or Gore. If she resists, some Republicans are ready to demand she resign. The House Government Reform & Oversight Committee already has cited her for contempt of Congress for refusing to surrender a confidential memo by LaBella.

The Clintonites, for their part, insist that they are not trying to lean on Reno. But they sent a not-so-subtle message to LaBella: He was denied the assignment he coveted, U.S. Attorney in San Diego.

LITTLE CHOICE. Republican threats and White House heat may not matter much at this point, though. The consensus among political observers is that Reno has little choice but to name yet another independent counsel. Their reasoning: It will be difficult for her to dismiss the strong recommendations of both her FBI chief and her own task force. "For political and legal reasons, she has got to do it," says C. Boyden Gray, White House counsel to President George Bush. "She would be ridiculed if she didn't."

In the end, whatever decision Reno reaches will be called both cowardly and courageous. The only question is whether it will be Democrats or Republicans demanding her scalp.

By Richard S. Dunham

CAPITAL WRAPUP

RADLEY: IN PLAY FOR 2000?

Former New Jersey Senator Bill adley has returned to the political urt in what some scandal-weary mocrats hope is a prelude to a 2000 residential bid by the party's "Mr. ean." Bradley's own political action mmittee, dubbed Time Future Inc., ised $120,000 in the first six months 1998, according to Federal Election mmission reports. Among the nors: Hollywood producer/director dney Pollack and ex-Chicago Bulls ach Phil Jackson, a Bradley teammate on the world champion New York Knicks back in the 1970s.

Bradley's PAC has distributed $21,000 to Democratic candidates, including three endangered women senators: Patty Murray of Washington, Carol Moseley-Braun of Illinois, and Barbara Boxer of California. Bradley is an eclectic expert on issues ranging from race relations to global economics—and a leading advocate of campaign-finance reform. Ironically, he is sure to make friends through the generosity of his PAC. That could come in handy should Bradley decide to run.

CHALLENGING LIBERAL LEADERS

▶ Democratic moderates in the House are hoping to tug their liberal leadership to the center by mounting a challenge for the No. 4 post. Representative Calvin M. Dooley (D-Calif.), co-chair of the centrist New Democrat Coalition, is running for vice-chair of the House Democratic Caucus. But with moderates in the minority, Dooley faces a tough race. The front-runner is Robert Menendez of New Jersey, a four-term liberal who has a strong pro-union record.

MERGERS

FROM BIG TO BEHEMOTH

After BP-Amoco, the oil patch may be in for a wave of megamergers

Since taking command at British Petroleum Co. in 1995, John Browne has been sending shock waves through the oil industry. Now he is close to pulling off his biggest shocker yet. The $53 billion merger with Amoco Corp. announced on Aug. 11 not only will create a third "supermajor," approaching Exxon Corp. and Royal/Dutch Shell Group, it also may herald a sweeping realignment of the industry.

GOT GAS? *The n outfit will boast some 18,000 out*

Big Oil has been one of the few industries left largely touched by the 1990s' merger frenzy. longer. With the new BP Amoco PLC apulted into the industry's top tier, p sure will be intense for others to the wave. Indeed, shares of Chevr Mobil, and Texaco all spurted on Aug. despite the overall market decline. "T deal puts pressure on all the oil com nies," says Stan Majcher, petroleum alyst at Los Angeles-based institutio fund manager Hotchkis & Wiley. " market is saying, 'You need to be tremely large to be competitive.'"

RABID RIVALRY. Browne, 50, will be of the new company while his coun part at Amoco, H. Laurance Fuller, will be co-chairman until his retirem at the end of 2000. In an intervi Browne insisted that bigger is, inde better. Competition is becoming fie as national companies from Venezu Saudi Arabia, and China branch ou

WHY BIG OIL WANTS TO BECOME EVEN BIGGER OIL

- Greater size gives efficient producers a way to further lower unit costs in an era of low-priced oil
- Behemoths can build "core" exploration areas to spread the costs of platforms and pipelines, gaining an advantage over more scattered rivals
- Greater financial strength is needed to afford the up to $5 billion projects planned in frontier areas such as West Africa and the Caspian Sea
- Geographic diversity can help shield the Bigs from regional downturns such as Asia
- Investors are lavishing the largest oil companies with price-earnings premiums of around 20%

DATA: BUSINESS WEEK

home territories. European outfits Total and Elf Aquitaine are also enging big internationals. To prosper a era of $13 crude oil, Browne says, panies need vast financial clout as as scale to drive down costs. With elopment costs for new fields in the ons of dollars, only the largest com- es are likely to get access to giant s where the biggest profits are made. nd, Browne says, companies are go- to have to invest heavily to supply easingly demanding consumers with ner and cheaper fuels, liquefied nat- gas, or packages of petrochemical stocks. Indeed, investors are already arding Shell and Exxon with price- ings premiums of around 20%.

P Amoco will now have plenty of . Its $6.4 billion in profits would put new entity third behind Exxon and ll, while its 14.8 billion barrels of oil gas reserves would rank BP Amoco nd behind Shell among nonstate oil panies. The company would have rly 18,000 gasoline outlets world- e, rank third among the world's largest chemical makers, and be the largest U.S. producer of oil and gas. To increase profitability, BP Amoco expects to whack about $2 billion in costs within two years of closing the deal. About $1 billion will come from 6,000 job cuts, many of them in U.S. downstream operations.

But it is not cost-cutting that excites Browne. He sees the deal as a springboard from the second tier to the big time. "We're not going to settle for an easy third place," he says. "The whole point of the deal is it gives us the opportunity to do more."

BP Amoco, he says, will have control of its own destiny instead of having to settle for small stakes in joint ventures. It will, for instance, have a better shot at exploration acreage because it will be able to offer developing countries packages including prized downstream investments that create jobs. Countries are nervous about companies that just want to develop profitable oil fields, Browne says. "That looks like you are there just to take a quick rent," he notes. "They would like you to do something for the real economy."

BP Amoco will be a dominant player in Venezuela, Azerbaijan, and Colombia. Another possible target would be China, where BP has already made preliminary forays. "We will have the scale to approach China in a way we would not have before," says Fuller.

Browne also sees big gains to be made by culling the best of the two companies' technologies. Despite the industry's "John Wayne, brute strength" image, he says, it is actually the largest U.S. employer of engineers and scientists after the information-technology business. Applying the best of each company's technology across a much broader canvas should be a big profit booster, Browne argues.

For the soft-talking, cheroot-smoking Browne, the bid for Amoco is yet another example of a career at the cutting edge. As head of exploration operations in the early '90s, he successfully focused BP on a few key areas and sold off loads of unproductive assets. He believes that only by being first on huge finds can a company produce fat returns. "The thing about giant fields is they have the lowest costs and the next-size fields come along with them," he says.

As CEO in 1995, Browne put together the industry's first downstream alliance, combining BP and Mobil Corp.'s European refineries and gas stations. Shell, Texaco, and Saudi Arabian Oil Co. recently copied that move in the U.S.

ON THE PROWL. BP was a troubled company in the early '90s, but its strong recent performance has given it the financial strength to attempt the biggest oil industry merger ever. BP's 15% return on capital employed last year—a key measure of financial efficiency—ranked just behind industry leader Exxon's 15.5%. BP has been on the prowl for acquisitions in recent years. A financial source says BP also mulled mergers with Mobil and U.S. chemicals giant Union Carbide Corp. before settling on Amoco. It had been talking to Amoco for about a decade on petrochemicals, but the idea for a merger came up at a meeting between Browne and Fuller in June.

BP'S BROWNE: *"We're not going to settle for an easy third place"*

Both BP and Amoco felt pressure to get bigger. "We've both been convinced consolidation would happen," says Amoco President William G. Lowrie. "It's been a matter of when, not if." The British company was willing to pay a 15% premium because it considers Amoco a good fit. The deal will boost BP's U.S. marketing efforts, which it thought were weak. U.S. filling stations will eventually be under the more appealing Amoco brand.

The surprise is that such a deal hasn't come sooner. Oil watchers have been saying for a year that the industry has reached the limits of internal cost-cutting. But it has taken deals such as Browne's with Mobil and Amoco to show the way. Browne says that he doesn't know if BP and Amoco will stop here. It's a fair guess that a lot of other boardrooms will get busy, too.

By Gary McWilliams in Houston and Stanley Reed in New York, with Kerry Capell in London

JAPAN

HONDA: A HECKUVA TIME TO SWITCH DRIVERS

Maintaining profits won't be easy for CEO Hiroyuki Yoshino

For eight years, Honda Motor Co. has been the carmaker that could do no wrong. By almost any measure—sales, profits, market share—Japan's No. 3 carmaker is one of the country's few winners. Honda closed in on the rear bumper of titan Toyota Motor Corp. and raced ahead of rivals such as Mitsubishi Motors Corp. In the U.S., it built such a successful franchise that customers now demand more Accords than the carmaker can pump out of its Marysville (Ohio) plant. And as a latecomer to Southeast Asia, it has escaped the region's free fall mostly unscathed. As a result, Honda posted record profits of $1.8 billion on revenues of $41 billion for the year ended last March.

That's the legacy left for Hiroyuki Yoshino, who took over as Honda's CEO this summer. Yoshino, 58, would like to maintain Honda's Midas touch through the millennium, but he couldn't be taking the helm at a worse time. Japan's economy is in recession, shrinking the market for cars there, and competition is increasing. To face this challenge, Yoshino is trying to squeeze costs even more while counting on strong U.S. sales. And rather than build new factories, he's ramping up production at existing ones, despite being close to capacity. "First, we will try to increase production by strengthening our existing operations," says Yoshino.

CURRENCY EFFECT. The weak yen helps. Each one-yen drop against the dollar adds an estimated $55 million to Honda's bottom line. Honda will get an extra boost from the currency effect this fall when it plans to export 60,000 Accords to the U.S.—roughly the amount by which Yoshino expects sales to drop in Japan this year. But Honda must be cautious. Detroit's Big Three could take to the warpath if Honda relies too heavily on export strategies.

CHALLENGES
The new boss must cope with Japan's recession and tough rivals

Honda is now selling all the cars it can make in the U.S., where its $19,500 Accord is the top-selling car this year. This fall, it will launch a new near-luxury Acura TL sedan and its largest vehicle—the 3.5-liter, V-6 engine Odyssey minivan, which will sell in the $20,000 to $30,000 range. With those launches, Honda will be able to produce nearly 1 million vehicles in North America annually. Yoshino has the flexibility of cranking up overtime assembly, which could push produc to 1.2 million by 2000.

The new, larger minivan for the U the size of a Dodge Caravan, is par Honda's strategy of developing vehi suited for the world's diverging car m kets. In Europe, it's the opposite tac a fleet of smaller cars as part of "small is smart" strategy. Honda plans to boost European capacity 4 to 250,000 vehicles year by 2000.

Skeptical analysts th Yoshino may have a h time making money Europe. Standard Poor's DRI forecasts Honda's market share climb from 1.6% this y to 2.2% in 2002 after H da makes inroads into rope's market with a 2.0-liter compact car er this year. But p competition in comp cars will be brutal. "W that volume, there is way they can make m ey in Europe," says Endo, automotive ana at Schroders Japan L

LEAN MACHINE. Yosh counters that he can crease the company's p it margins "even when are producing sma cars," but he's not say how. "If we can do t then the larger-size will be even more p itable," he says.

Yet some analysts w ry that there are places left to squeeze the past, Honda has b able to reduce product costs by as much as 3 But that leaves little cut. More than 80% Honda's cars are b from the same bases, many share as much 60% of the same pa "They can only milk existing platforms much more," says Step Usher, automotive analyst at Jard Fleming Securities.

That means in order to cut co Yoshino, who trained as an aeronaut engineer and oversaw research and velopment before becoming CEO, n need a technological breakthrou Yoshino wants to implement flexible p duction methods that will enable company to keep profitable small-

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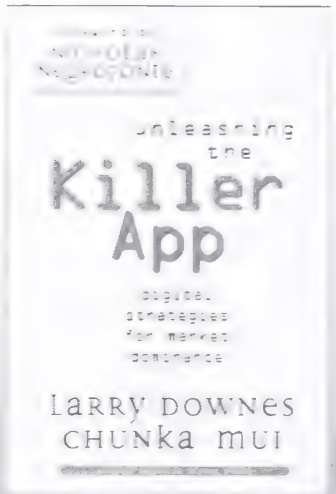

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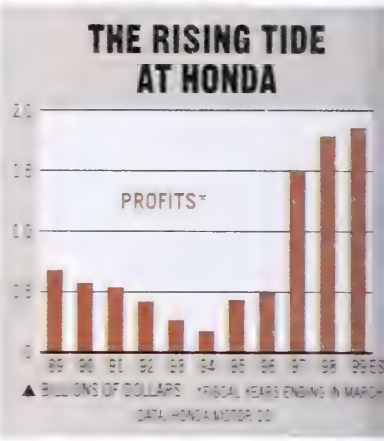
and small-volume operations. But one is sure how this will be done.

First, though, Honda needs to pr it can keep the market share it w last year at home. "Honda gained sh because it had good cars and its deal cooperated," says Toshio Nakata, pre dent of the Honda Clio Tokyo deal ship. "Now we have to work even m closely together to make sure these n customers are satisfied and continue drive Honda cars." Led by the $9,3 Capa, a hip, ultrasmall minivan, and $12,480 Stepwagon sport-utility, Hon continues to gain ground with fashi



customers young buyers. It racked 3.7% more car sales in July, even thou the market overall slid by 8.4%.

In a scramble to woo buyers in a cession, carmakers plan to launch new cars this year in Japan, more th twice last year's number, estimates J dine Fleming Securities. Toyota pla a new, aggressively styled compact It will also slash the car's product cost by 30%, compared with its previ compact models. Yoshino revised H da's calendar-year sales target for Ja down to 764,000 cars from 810,000. H da will not easily suffer defeat, howe The company aims to repeat last ye success by counterattacking with new minicars, a classy SSM sports and a new subcompact sport-utility.

Despite the tough road ahead, Yo no is making it clear he thinks Ho can make it as a nimble player. He s Honda will not pursue any megame ers like the Daimler-Chrysler tie-up, will it invest aggressively in more pacity worldwide. Instead, Yoshino pl to follow a contrarian strategy of ing it alone at a time when the res the world's auto heavies are join forces. And, make no mistake abou he wants to take them head-on.

By Emily Thornton in Tokyo, w Larry Armstrong in Los Angeles David Woodruff in Frankfurt

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Galley and Zimmerman are building a global fund business

GALLEY AND ZIMMERMAN: *A target of $500 billion in four or five years*

Not long ago, a reporter arrived behind schedule for lunch with two senior British investment bankers. But when he explained that "Carol Galley kept me late," the bankers' irritation vanished. Instead, they demanded to know what Galley had to say about the markets.

In the City of London, Galley, 49, is perceived with something approaching awe. Probably the most prominent businesswoman in Britain, the elegant Galley has made a name for herself as a savvy stock-picker whose investment decisions have been known to determine the fate of entire companies. It's Galley's cachet that has helped build Mercury Asset Management Group PLC into Britain's premier fund manager (table, page 51). "Mercury has strength and depth," says Peter A. Murray, chief executive of the British railways pension system, who entrusts $7.3 billion to Galley and her colleague, Stephen A. Zimmerman. "They can outperform in almost any equity market."

Galley enhanced her reputation last year when she and Zimmerman, also 49, sold Mercury to Merrill Lynch & Co. for $5.2 billion. At 25 times earnings, it was a fat price to pay for a British fund-management house—even one that was founded by the legendary Siegmund Warburg. But Merrill didn't just buy this elite manager to handle mutual funds and pensions in Britain. It sees Mercury as its ticket into the lucrative business of fund management around the globe. The fast-growing asset-management markets of Europe and Japan alone could amount to $9 trillion in a few years. "This is an enormous opportunity," says Jeffrey M. Peek, pres-

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joined Mercury in 1971 and
collaborated closely for
. Zimmerman was deputy
man before the sale, han-
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DATA: BUSINESS WEEK, MERRILL LYNCH & CO

siasm. They say they want to double the sum that Merrill Lynch Mercury Asset Management—their firm's new name—has under its umbrella, to roughly $500 billion in four or five years. That would put Merrill in the elite club of asset managers, including Fidelity Investments and Switzerland's UBS, that are expected to dominate international fund management in years to come.

To put the strategy in place, Galley and Zimmerman have been shuttling between London and New York for skull sessions with Merrill's hometown brass. The missions have already spawned several projects. In the U.S., Mercury is creating a global and a European equity mutual fund that Merrill can offer to wealthy investors this fall. Merrill is hoping that the mutual funds will pull in about $1 billion. Galley and Zimmerman have also taken charge of Merrill's $50 billion U.S. pension business in hopes of broadening its current base of bonds and international equities.

But Merrill's big targets are Europe and Japan. After years of being nearly off-limits to foreign money managers, Japan is finally opening its doors to foreigners to help oversee the country's $10 trillion in household savings. Zimmerman figures that foreigners could be managing $1 trillion by 2002. Mercury came to Merrill with a strong

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hold managing pensions for 25 of top 50 Japanese companies. But the Mercury has added some $3 bil- this year, bringing its total to $11 on. Mercury also collaborated on a h project with Merrill's retail mutu- nd arm earlier this year to create unds for the Japanese market. In- ed in global equities bonds, the funds will sold through the 33 es that Merrill picked n February from the ckage of failed Ya- hi Securities Co.

GET: EUROPE. Merrill similar opportunities urope. Its $9 trillion omy is even bigger that of the U.S. But Continent's private- ion and mutual-fund istries are still in r infancy. The leading British pen- -fund manager, with $125 billion in orate retirement assets, Mercury is ing up for an assault on the Conti- . Drawing on Merrill's knowhow, ey and Zimmerman are zeroing in Europe's moves to get workers into ned-contribution pension accounts similar to America's 401(k)s. They're also beefing up their mutual-fund marketing teams in anticipation that German and French investors will make a shift from domestic investments to European funds once a single currency arrives next year.

WHERE MERCURY MANAGES MONEY

	BILLIONS
BRITAIN	$141.6
EUROPE/MIDEAST	15.4
AMERICAS	57.6
JAPAN	11.0
ASIA/AUSTRALIA	8.8
TOTAL	234.4

DATA MERRILL LYNCH MERCURY ASSET MANAGEMENT

Despite Merrill's—and Galley and Zimmerman's—lofty ambitions, becoming a global winner is far from guaranteed. More than half of Mercury's assets remain in Britain, a mature market where competition is on the rise and Mercury hasn't much room to grow. And Mercury has trailed in selling funds to individual investors, one of its chosen global growth strategies. Domestically, it's the top pension-fund manager, but it is only fifth in retail funds.

Mercury has also suffered some corporate client defections after a less-than-stellar record in some funds lately. Over the past 12 months, its $8.4 billion Mercury MFS pooled fund ranked 49th among 66 peers, returning 16.9%, vs. a median of 19.8%, according to Combined Actuarial Performance Services Ltd., a pension consultant.

Galley and Zimmerman say that Mercury's returns have recovered. But some companies are beginning to transfer their pension funds from Mercury and other active fund managers into cheaper index funds or accounts run by better-performing American competitors, such as Capital International, J. P. Morgan, and Fidelity International. Still, if Mercury's global strategy is successful, its travails in the British market will seem insignificant only a few years from now. And Mercury's stock-picking skills may come back into favor in a tougher market. Meanwhile, where is Mercury investing its money? It's underweighted in U.S. and Asian stock markets and overweighted in European equities and bonds in Western industrialized countries. Galley adds that with their management responsibilities growing, she and Zimmerman miss the hands-on feeling of running other people's money. But they have an even bigger job now: turning Merrill into a global brand name in fund management.

By Stanley Reed in London, with Brian Bremner in Tokyo

Foreign Intelligence.

What's Your Global Priority?<---

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'ED BY JOHN TEMPLEMAN

ERMANY: THE WILTING F THE GREENS?

ressed in a chic black silk suit and T-shirt, Joschka Fis-cher emerges from his campaign bus in the northern German town of Erkelenz to stump for national elections ept 27. In blistering summer heat, the 50-year-old leader ermany's Alliance 90/The Greens hammers at themes would once have gagged the former environmental rad-more jobs, lower corporate taxes, smaller government. e Greens have come a long way from their tree-hugging But just as the pragmatic Fischer seemed poised to help Chancellor Helmut Kohl's 16-year reign orming a ruling coalition with the Social ocratic Party, ideologues within his party a series of gaffes that is pushing power nd the Greens' grasp. Since the spring, support has slid to just 6% of voters, a peak of 14% last summer, and even be-heir 7.3% score in 1994 elections.

TAKES." The fundamentalist wing of the , the Fundis, scared off new supporters by king some of Germany's sacred cows. They for a 62 mph speed limit on the country's *bahnen*, tax hikes that would triple gaso-ump prices, to more than $12 per gallon 10 years, and a limit on vacations involv-ir travel to one every five years per per-'We've made mistakes, of course—the mis- of newcomers," admits Fischer.

owever, the rookie fumbles aren't likely forgiven quickly. The SPD and the Greens together poll 47%, down from last summer's 52% peak and only owly ahead of a 44% share for Kohl's Christian Demo- Union and its Free Democratic Party allies. As a result, rospect of a Red-Green coalition between the SPD and ns is receding. "A Red-Green coalition is still possible, 's not guaranteed," says SPD official Matthias Machnig. e opposition hasn't lost all hope of winning an overall ity. With the election less than two months away, 40% of voters are still undecided. If Fischer can regain lost ground, he could still play kingmaker for Gerhard Schröder, the SPD's candidate for Chancellor. "Kingmaker? The Greens are more like a king killer," sniffs Hans-Joachim Veen, head of political research at the CDU's Konrad Adenauer Foundation think tank in Bonn. Analysts like Oliver Krieg, political researcher at the Emnid Institute polling outfit in Bielefeld, say the Greens won't be able to regain their momentum anytime soon. If the SPD can't itself scoop up enough votes, the self-destruction of the Greens could force it into a grand coalition with Kohl's CDU.

FISCHER: *He admits gaffes*

Fischer, who comes from the realistic—or Realo—side of the party, has worked hard to steer the Greens into the political mainstream. Officially, the party supports the euro, Europe's single currency. It continues to back Germany's participation in Bosnian peacekeeping missions. It also wants to cut corporate tax rates to 35% from 45% and relax rigid labor laws. "We want to develop a good climate for investment," says Fischer.

But the Fundis' summer follies make it hard for the Greens to appear anything but a divided, one-issue party. Two-thirds of voters polled by Emnid in mid-July think the Greens are unfit to be in federal government. Moreover, the Allensbach Institute found that 52% of voters polled in 1997 thought there were enough environmental laws already, compared with 24% in 1984. "The Greens are out of fashion," says co-director Renate Köcher. "Other points are more important now."

Fischer once said there's no sense being in politics if you don't want to win power. In the campaign's remaining weeks, he's got to convince voters that giving the Greens power makes sense.

By Karen Lowry Miller in Frankfurt and Thane Peterson on the campaign bus

GLOBAL WRAPUP

RDAN FACES NEW DOUBTS

ordanians rushed to amass dollars he end of July after King Hus-'s announcement that he was ut to start chemotherapy in the . to treat his lymphoma. The se of panic subsided recently, but ıy unresolved questions about Jor-'s future remain.

f the King dies, analysts say, the litional split between Jordan's estinian majority and the rest of population could become explosive. n Jordan's peace treaty with Israel could be at risk. There is also some suspicion that Israel might use a leadership crisis to encourage a takeover in Amman by a Palestinian regime—to ease pressure for a Palestinian state in the West Bank and Gaza.

In theory, Hussein's succession has been assured since 1965, when his younger brother Crown Prince Hassan was made heir to the throne. "Hassan's place is secure," says Mustafa Hamarneh, director of the Center for Strategic Studies at the University of Jordan. Still, political salons in the capital are abuzz with rumors that Hussein may try to dump Hassan in favor of one of his own sons.

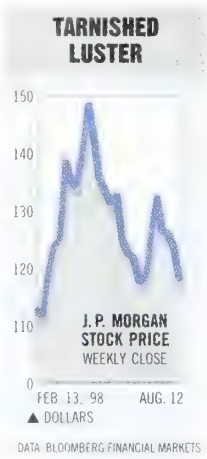
Either way, the country will be hard-pressed to replace the charisma and savvy that Hussein has developed over his 46-year reign. The intellectual Hassan, critics say, doesn't have his brother's ability to lead the nation by intricately balancing local and regional demands. He also lacks the strong ties to Jordan's tribal leaders that the King has. The risk is that the country will lose the cement that has held it together in recent turbulent decades.

By Kirk Albrecht in Amman

BY GENE G. MARCIAL

J.P. MORGAN MAY BE RECEIVING CALLERS

Despite its shining image worldwide, J. P. Morgan (JPM) is no star on Wall Street. Both last year and this, the shares of the bank holding company have trailed the Standard & Poor's 500-stock index and the money-center bank indexes. "That puts J. P. Morgan under the gun—and at the head of the list of banks ripe for buyout," says a strategist at a New York investment bank. The stock closed at 118¼ on Aug. 12, down from 148 on Apr. 15.



The buzz: A much larger European bank has been in talks with Morgan about a merger or acquisition. The price being discussed, says the investment pro who claims to be familiar with the informal talks, is $30 billion, or $175 a share—2½ times Morgan's estimated 1999 book value of $70 a share. He believes, however, that Morgan is holding out for $200. Morgan has assets of more than $262 billion and a market cap of $20.6 billion.

Earlier this summer, Chase Manhattan was said to be eyeballing Morgan, but the whispers have since faded, although arbitrageurs insist that Chase shouldn't be counted out just yet.

Morgan Chairman Douglas "Sandy" Warner III "is under tremendous pressure from big shareholders to boost the stock," notes an institutional investor who holds a large stake in Morgan, which owns Morgan Guaranty Trust, the fourth-largest U. S. bank. As banks consolidate, "it's difficult not to imagine J. P. Morgan as a buyout or merger candidate," says S&P banking analyst Stephen Biggar.

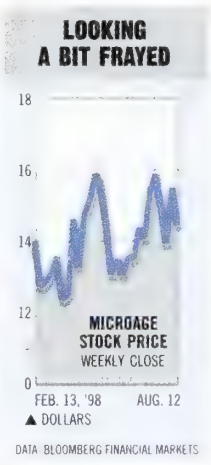
Biggar rates the stock a hold, based on the fundamentals—including worries about difficulties in Asia, which, he notes, have hurt Morgan's overall results. "There isn't much I see that could put fire under the stock—except, perhaps, for a buyout," argues the analyst. He doesn't include a buyout in his rating. "I'm not aware of any deal," he says, "but I wouldn't rule it out."

Morgan has lots to offer, says Biggar, including a wide range of businesses: 60% of its income comes from advisory, capital-raising, market-making, and asset-management services. He figures Morgan will earn $8.25 a share this year and $8.75 in 1999, up from last year's $7.17. Morgan spokesman Joe Evangelisti declined comment as a matter of policy. At the April annual meeting, Warner said Morgan intended to stay with its go-it-alone strategy.

UNTANGLING THE WIRES AT MICROAGE

Shares of MicroAge (MICA) have been on the ropes, partly because of disappointing earnings. Its stock has tumbled—to 14¼ a share on Aug. 12, down from 29 last September. But MicroAge will perk up, say several pros. For one, earnings should rebound. But more important: They expect this integrator and distributor of info-tech products and services to unload its Pinacor unit, which distributes products to resellers.

On Apr. 13, when MicroAge was mentioned in this column, Chairman Jeff McKeever said he was considering all options—including selling the distribution business—to boost the stock. Since then, he has split MicroAge, with expected sales of $5.5 billion to $6 billion in the fiscal year ending Oct. 31, 1998, into two units: MicroAge Integration, which provides and installs systems, and Pinacor.



Now, a deal looks set for the sale of Pinacor, expected to post sales of $4.5 billion this year, to CHS Electronics, for $650 million in cash and stock. That translates into $32 a share in MicroAge stock. CHS distributes minicomputer products.

Analysts forecast profits of $1.09 in 1999, as demand for info-tech resurges, vs. an expected 24¢ loss in fiscal 1998. MicroAge spokeswoman Michelle Gorel says the company is considering all options for Pinacor. CHS CEO Claudio Oscorio was unavailable for comment.

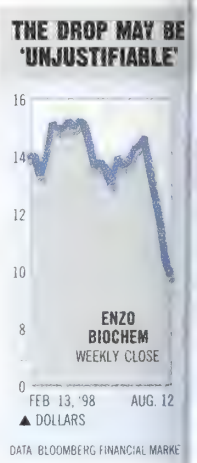
A NEW REMEDY FOR WHAT AILS ENZO?

How low is low in this market? Enz Biochem (ENZ), whose stock plunge to 9 on Aug. 11, down from 20 a shar 10 months ago, probably can't go muc lower. So says money manager Ra Hines, president of MarketMetrix.

The stock's drop is "unjustifiable," h argues, because Enzo is cash-flow pos tive, with $38 million in cash and n debt, and is making money. By Au 12, the stock had edged up to 10¾. A other reason: Enzo, which makes diag nostic products based on molecular bio ogy and genetic engineering, is close t signing a deal with a European dru giant for its DNA probe kits.

The partner will provide Enzo wit the resources to develop and market it probes—designed to detect disease such as AIDS and hepatitis. The strateg partner could take an equity stake i Enzo. The market for the DNA prob kits is about $1 billion, says Hines.

On July 13, Enzo started Phase clinical tests of its patented genetic the apeutic product designed to treat people infected with HIV-1. If successful, the new therapy could free such patients from the need for other medications, some of which have debilitating side effects, says Senior Vice-President Dean Engelhardt. At the recent World AIDS Conference in Geneva, he reported that in lab studies, the active genes clone into the product gave 92% to 99% pr tection for human immune cells again HIV-1 infection.



Hines sees Enzo's earnings rampi up next year, when he projects profits 60¢ to 80¢ for fiscal 1999, ending July up from an estimated 25¢ in 1998. earned 6¢ a share in 1997.

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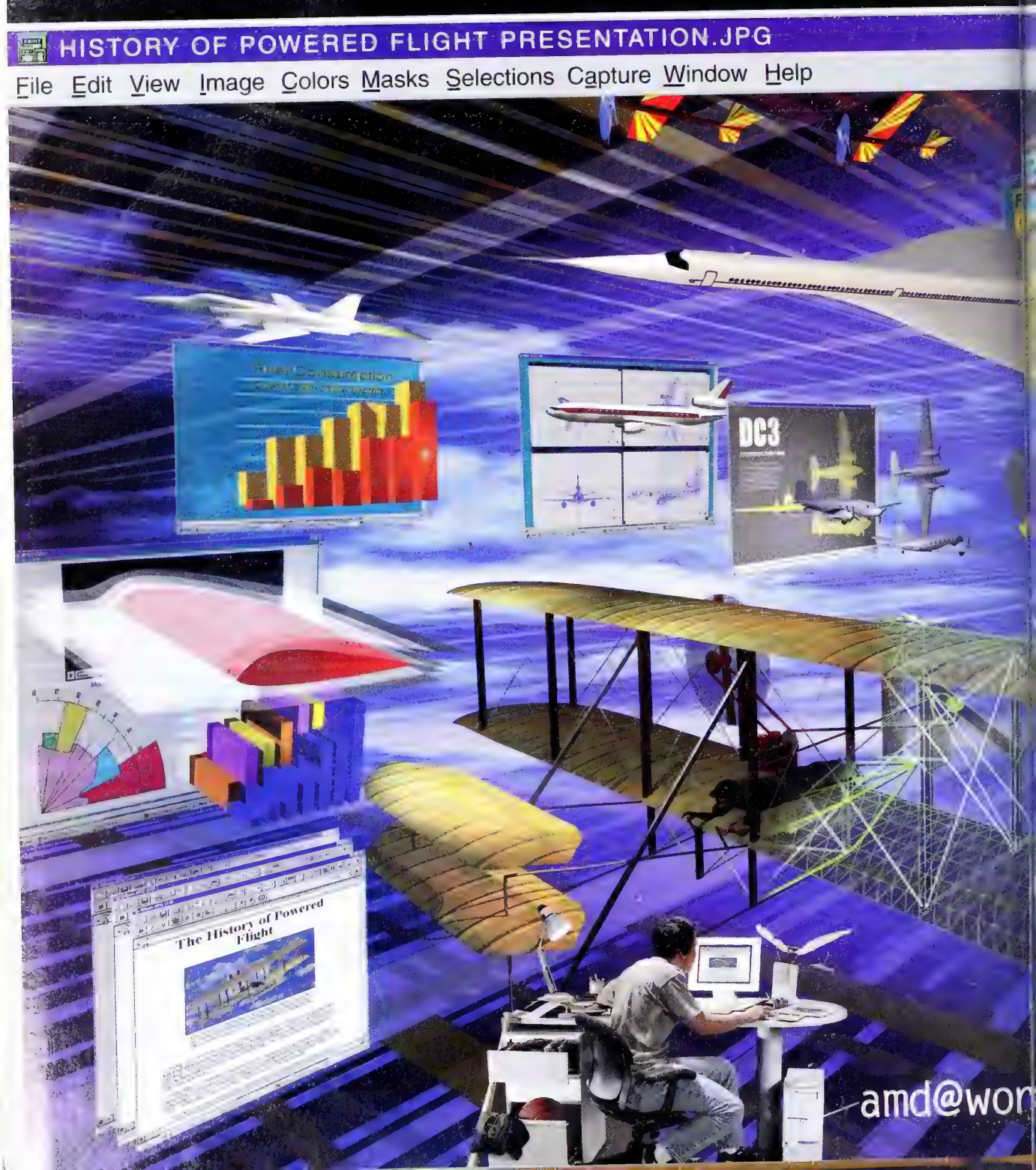

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THE 21ST CEN

Don't expect volatility to go away, but as the '90s come to a close, all the elements are in place for an era of long-term growth

Economies, like living organisms, always evolve in response to challenges and opportunities. The changes can be dramatic.

Only 10 years ago, Japan was triumphant and the U.S. was struggling with slow growth and a hobbled banking system.

But today's statistics tell a very different story. By virtually every measure, the 1990s have turned out to be a decade of unexpected prosperity for the U.S.—what BUSINESS WEEK and others have called the New Economy. The numbers are impressive: a 70% increase in real profits since 1990, inflation low 2%, 4.5% unemployment, plus rising wages, even for the lowest-paid workers.

What's next? For two months, a team BUSINESS WEEK reporters and editors has examined every aspect of the economy, fr technology to politics to higher education

Our findings: The '90s are no fluke. Des Asia's woes, all the ingredients are in pla for a surge of innovation that could rival in history. Over the next decade or so, th New Economy—so far propelled mainly b information technology—may turn out to only the initial stage of a much broader f ering of technological, business, and finan creativity.

Call it the 21st Century Economy—an economy that, driven by technological progress, can grow at a 3% pace for year come. The innovation pipeline is fuller th it has been in decades. With the advent

THE BIG PICTURE

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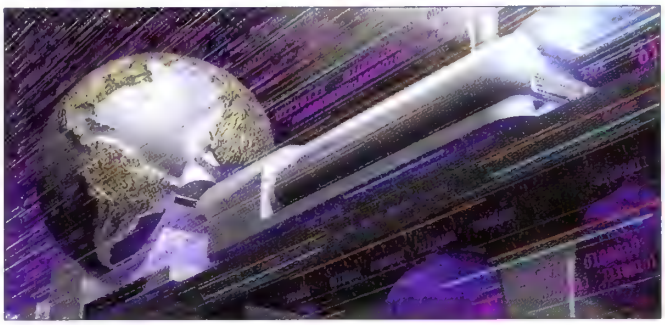
TURY ECONOMY



ternet, the information revolution
to be spreading and accelerating rather
lowing down. Biotechnology is on the
of having a major economic impact.
ı labs across the country, scientists are
g toward the frontiers of nanotechnolo-
th the goal of creating new devices that
ansform entire industries.
t's more, the U.S. economy seems to
lergoing a wholesale rejuvenation. Busi-
, financial service firms, and universities
inventing themselves. Even politicians and policymakers are starting to grasp the new technological and economic realities.

To be sure, the path from the New Economy to the 21st Century Economy will likely be a bumpy one. Each innovative surge creates economic and social ills, from recessions to stock-market crashes to widespread job losses—and this one won't be different. But that's the price a nation must pay to achieve the benefits of dynamic change.

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BusinessWeek ONLINE Additional information, including a collection of past articles that helped define the New Economy, are available at www.businessweek.com

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SUMMING UP

The Optimists Have it Right
Sure, the 21st Century Economy has been getting a lot of hype. But breaking technological boundaries and sustaining growth have been the rule—not the exception—throughout U.S. history **146**

INNOVATION

YOU AIN'T SEEN NOTHING YET

We're just at the start of a powerful surge in technology that will boost economic gains into the next century

In our society, "mature" is a euphemism for getting old. Consultants deride a mature market as one without much potential. And a mature economy, as economists use the term, can no longer sustain the high growth rates of younger, spryer economies. Indeed, as growth slowed in the 1970s and 1980s, mature was exactly the term that many economists applied to the U.S.

Boy, were they wrong. There's nothing old about the U.S. economy today. Instead, there's been an explosion of creativity and entrepreneurial vigor that puts U.S. competitors to shame. Seven years into the expansion, growth is running at a 3.5% rate over the last year, and despite a small dip in the second quarter, productivity is rising at a strong 1.9% rate.

There is growing evidence that the U.S. economy is in the early stages of a powerful new wave of innovation. The leading edge is the information revolution, which permeates every sector of the economy. Over the last year, for example, high tech has taken half a percentage point off inflation and added almost a full point to growth.

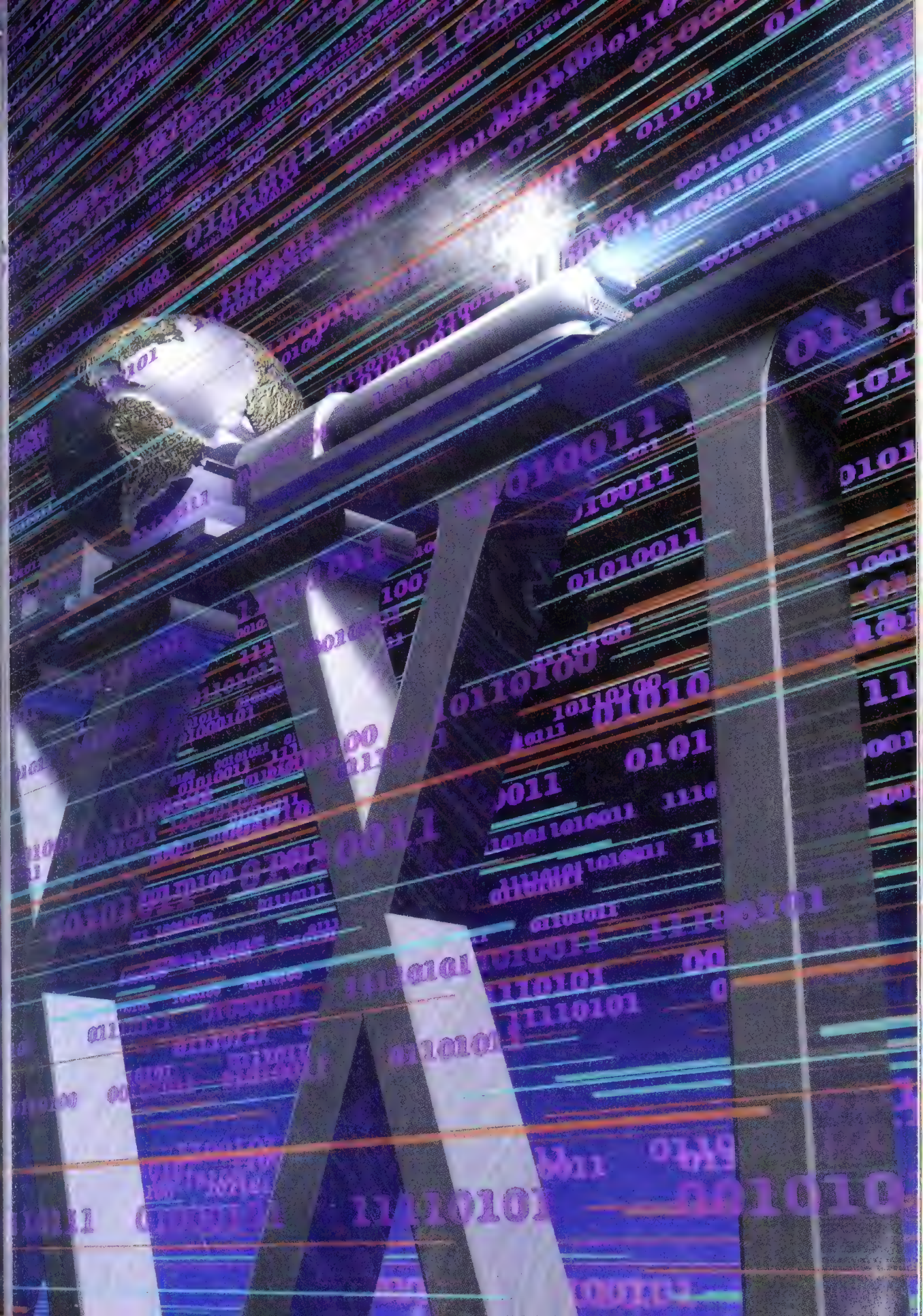
But there is much more to come. From the Internet to biotech to cutting-edge technologies that are just now nearing commercialization, the U.S. is riding a groundswell of innovation that could carry it well into the next century (pages 80, 86, 88). "We've never had a period in which innovation has so permeated our lives as in the 1990s," notes Joel Mokyr, an economic historian at Northwestern University who studies innovation. "We have acquired knowledge in at least three or four areas that will be truly revolutionary." Adds Arnold B. Baker, head economist at Sandia National Laboratories: "There's going to be a fundamental change in the global economy unlike anything we've had since cavemen began bartering."

WAGE SURGE. Welcome to the 21st Century Economy. Historically, periods of major innovation have brought profound increases in living standards. The last one, which started with railroads in the 1890s and lasted through the advent of television and jet travel in the 1950s and 1960s, saw a quadrupling of real per capita incomes, propelled by rising productivity.

The 21st Century Economy could see similar income gains, if the latest innovative wave can boost long-term growth to 3% rather than the 2.3% that most forecasters predict. Even over a period as short as the next ten years, faster growth dramatically changes the economic and financial landscape. Rather than remaining almost flat through 2008, real wages would actually rise by 9%, according to projections prepared for BUSINESS WEEK by Standard & Poor's DRI.

Corporations and investors would prosper as well in this scenario. In the 21st Century Economy, corporate earnings, adjusted for inflation, would rise by 54% over the next ten years compared with 25% in the slow-growth case. Combined with 30-year interest rates below 4%, that's spectacular news for the stock market.

The innovation boom, and the faster growth rate it could ignite, could make it much easier to address some of the vexing social and environmental problems of the 21st century. For example, a 3% annual growth rate will more than cover the needs of baby boomers' retirement, since it will lead to a 25% bigger economy in 2030. And expensive solutions to global warming, such as cutting carbon emissions



will become easier to bear if the economy is growing faster.

Are such gains really possible? Certainly, the U.S. economy has done far better in recent years than most economists expected, coming close to its spectacular performance of the 1960s. The single best measure of this is the productivity of nonfinancial corporations, which includes 75% of the business sector, from Microsoft Corp. to General Motors Corp., while omitting small businesses and financial companies. Since 1990, the productivity of nonfinancial corporations has risen at a strong 2.1% rate, far above the 1.5% seen from 1973 to 1990, and approaching the 2.4% of the 1960s and early 1970s. Manufacturing has done even better: Since 1990, factory productivity has been soaring at 3.6% annually, the fastest rate in the post-World War II era.

In the long run, the success of the 21st Century Economy will depend on whether technological progress will continue to drive growth, as it has so far in this decade. That would be a big change from the 1970s and 1980s. In those decades of economic stagnation, technology contributed almost nothing to growth, according to calculations by the Bureau of Labor Statistics. The computer revolution had yet to take off, and earlier innovations such as jet travel were no longer new.

But in the 1990s, the innovations have been coming thick and fast. This has changed the calculus of policymakers, enabling Fed Chairman Alan Greenspan to hold down interest rates even in the face of low unemployment (page 70). "Signs of major technological improvements are all around us," he observed in his July 21 testimony to Congress. "The benefits are evident not only in high-tech industries but also in production processes that have long been part of our industrial economy."

PAYBACK TIME. In part, the sudden re-emergence of technological progress is the culmination of years of research in disparate fields that are finally reaching critical mass. The Internet, which only became a commercial proposition in the mid-1990s, is the direct descendant of ARPANet, which was based on research funded by the Defense Dept. in the 1960s. The first successful gene-splicing experiment was done in 1973, but biotechnology is only now set to explode. Moreover, different parts of the innovation wave are starting to feed and reinforce one another, as fast computers greatly accelerate the ability of scientists to understand and manipulate genes. Conversely, biological techniques now seem the best foundations for developing tomorrow's new-generation computers.

The innovation wave is also being given more force by the globalization of the economy. Bright ideas developed in Israel or India quickly find world markets. Technologically savvy immigrants propel high-tech companies in Silicon Valley and elsewhere. And the ever-expanding markets offer the lure of mammoth profits for a successful product that can be sold worldwide. The result: It becomes far more attractive to speed up R&D in hopes of getting a competitive edge.

To be sure, the emergence of the 21st Century Economy does not put an end to recessions, financial crises, or the other ills that afflict market economies. Quite the contrary: Times of intense technological change are often volatile, as corporations and workers try to adjust to new technologies. Indeed, some of the deepest downturns in American history have come during periods of rapid productivity growth such as the first half of the 1900s. And, as the Asian crisis shows, the global economy exposes countries to risks that they did not face before (page 11

Many economists are skeptical of claims that the sustainab growth rate has permanently increased. For one thing, they a gue that the low inflation of recent years may simply be the r sult of a few lucky events, including falling oil prices, rath than any permanent structural change. Most important, the say, government economic statistics do not yet present a clea cut case that technological progress has accelerated. Th biggest productivity gains have come only since 1995, whi means that a few bad years could still easily wipe them out

Skeptics believe that today's hot technologies—the Interne biotech, and so forth—are inconsequential, in economic term

SMALL WORLD IBM researchers examine an array of copper microchips. Some of the biggest gains will occur in some of the tiniest technologies

compared with past breakthroughs. Fundamental innovatio such as electricity and the internal combustion engine, argu Robert J. Gordon of Northwestern University, one of the mo articulate critics of the New Economy, "made possible a ha century of rapid growth in productivity that far exceeds wh occurred before, what has occurred since, or what is likely occur in the foreseeable future." And Paul Krugman, a Mas achusetts Institute of Technology economist who has cons tently attacked the New Economy, recently wrote: "The tru is that we live in an age not of extraordinary progress but technological disappointment."

Other economists echo Krugman and Gordon's sentiment. lot of the easy wins have already been had," says Martin

y, a productivity expert at the McKinsey Global Institute a former member of Clinton's Council of Economic Advis- "It's harder to push out the frontier." Adds Robert M. w, Nobel laureate from MIT: "You can't expect the great old s to come back."

he experience of the 1970s and 1980s gives some weight to lack of faith in technology. The productivity slowdown caused in large part by the failure of some innovations to up to their early promise. Nuclear energy was supposed to he big breakthrough of the postwar era—a source of cheap limitless power. If the so-called Atomic Age had worked out xpected, the oil price rise of the 1970s would have been far damaging. Indeed, the utility industry was one of the gest contributors to the productivity slowdown of the 1970s. Meanwhile, the space program—identified by President John Kennedy in 1961 as America's top scientific priority—ab- ed a stunning 25% of the nation's civilian R&D dollars in the)s. But even though it reached its goal of putting a man on moon, the program has not yet generated the economic efits to justify the huge investments—though the increasing ortance of communications satellites may change that.

hese flamboyant flameouts may be leading the skeptics to erestimate the power of today's technological changes— as the Great Depression created a generation of economists investors who worried that another crash was just around corner. But today's innovations have a better chance of suc- ling because they are being developed by the private sector esponse to the profit motive, which automatically gives an incentive to seek out technologies that are economically viable. Nuclear power and the space program, by contrast, were creatures of government and of heavily regulated industries, which had no such incentive.

In information technology, profits motivate both buyers and sellers. Businesses are devoting more of their investment spending to computers and information technology, something that would make sense only if managers thought they were getting a real payoff. Over the last four years, business spending on computers has risen by 86%, far outpacing the 40% rise for all other types of investment. Certainly the productivity impact of computers is starting to show up in the numbers. For example, a new analysis from two Conference Board economists, Robert H. McGuckin and Kevin Stiroh, argues that manufacturing industries that use computers heavily have shown a brisk acceleration in productivity growth, from an annual rate of 3.2% in the 1980s to 5.7% in the 1990s.

Even so, much of the benefit of the information revolution is not being captured in the productivity data. Beyond manufacturing, the computer and communications explosion is totally transforming industries that move and process information, such as finance, media, entertainment, communications, and business services. Together, these industries make up about 25% of the economy—yet they are also very poorly measured by government statisticians. After all, how can you count the gains from having 24-hour access to your money at ATMs, or from being easily able to make calls from your cellular phone?

TINY WONDERS. New technologies coming to market will have equally pervasive and radical effects on other parts of the economy. Biotech, now beginning to take off, will have a strong influence on health care, agriculture, and the output of nondurables, such as chemicals and petroleum products—and these things account for a further 15% of the economy. And while many of today's biotech products are expensive, the history of technological innovation suggests that their prices will rapidly fall as production ramps up. Especially in health care, pharmaceutical companies will be under heavy pressure to find treatments that cut costs.

Just ahead are a set of innovations that could transform the economics of a wide range of industries. Microelectromechanical systems (MEMS)—a commercial toddler—will enable tiny sensors, motors, and pumps to be built right into microprocessors, which could have a big impact on transportation, food processing, and home appliances. And scientists are learning how to build up new materials atom by atom, which could transform the entire manufacturing sector, among others. What is exciting, says Peter M. Will of the Information Sciences Institute at the University of Southern California, is the "potential to fundamentally change matter, to create things and materials that can never exist otherwise."

Of course, it's hard to predict which innovations will succeed and which won't. Technologies that look good in the laboratory or on the drawing board can fizzle out due to unforeseen complications, as did nuclear power.

But history says that the odds are good. Out of the last 10 decades, eight have been periods of strong innovation. In the end, the slow-growth 1970s and 1980s will look like the exceptions, not the rule. On the edge of the 21st century, the U.S. economy is anything but mature.

By Michael J. Mandel in New York

T WILL DRIVE THE 21ST CENTURY ECONOMY...

formation revolution will continue to boost productivity across the . Over the next 10 years, such information-dependent industries as media, and wholesale and retail trade will change the most.

ge of major technology breakthroughs, including biotechnology and ill begin to create entire new industries over the next 10 years.

asing globalization will simultaneously provide much larger mar- tough foreign competitors. The result: Companies will have even entive to innovate while cutting costs.

HOW IT WILL DEFINE THE COMING DECADES

conomy will grow substantially faster than most economists perhaps 3% or more per year.

ionary surges and large budget deficits will become less likely.

te all the scare talk, the next generation will enjoy a rising stan- iving, even while baby boomers are able to retire comfortably.

ries that follow policies that encourage innovation, free trade, and ancial systems will enjoy a competitive edge.

esses that master the new technologies will be able to count on rofits and bigger market share.

THE DOWNSIDE

dislocations and uncertainty for workers and businesses will be le as new technologies are adopted.

ology shocks will increase economic and financial volatility, both .S. and globally.

PERSPECTIVE

YES, VIRGINIA, THERE WILL BE RECESSIONS

The U.S. economy has been growing for more than seven years. Even the widespread turmoil in Asia seems so far to have done nothing more than slow it down a bit. Does the dawning of the 21st Century Economy mean that we have seen our last recession?

The clear answer is no—you might as well ask whether a car can be built that never has an accident. Despite its current strength, the U.S. still could easily be sent into a downturn by any one of a number of different shocks. A collapse of the Japanese economy, say, could devastate U.S. financial markets and send the economy into a tailspin. Another steep plunge in the stock market, on top of the nearly 900-point drop in the Dow since July, could have an equally large negative impact by causing consumers to stop spending. Or the economy could be taken down by some unexpected event, just as the oil price shocks of the 1970s and the gulf war triggered recessions.

But even a deep recession or a stock market crash would not be a sign that the productivity gains of the 1990s are a myth, or that the 21st Century Economy is illusory. Quite the contrary—history suggests that eras of rapid technological progress and productivity increases are often accompanied by economic volatility, not stability.

Consider, for example, the first half of the 20th century, perhaps the most impressive period of technological progress yet seen. During this 50-year stretch, a series of breakthrough innovations—from autos to telephones—dramatically transformed the way people lived. And with the productivity of labor rising at an average rate exceeding 2% per year, living standards soared for almost everyone. Average real income per capita in 1950 was more than double that of 1900, and life expectancies rose from 47 years to 68 years, an incredible difference.

PLANT GROWTH. But that same 50-year stretch included the Great Depression and 11 smaller recessions. In particular, the Depression came right after the boom of the 1920s, a decade when manufacturing output per hour exploded by 63%. During the 1920s, the economy grew at a 6% annual rate, driven by the new technologies of the day: autos and radio. The number of autos on the road tripled during the decade, and by 1930 more than 40% of households had radio sets, up from virtually none at the beginning of the decade.

HUDSON LINE Cars fueled the '20s economy—until overcapacity set in

High productivity growth did not protect the country from the Great Depression. To the contrary: There is evidence that the productive capacity of the economy outran the ability of consumers to absorb the goods pouring out of the factories. This was particularly true in the auto industry, where producers such as General Motors Corp. and Ford Motor Co. competed for dominance by constantly building new factories in a bid for market share. "By the end of the 1920s, there was huge overcapacity in autos," notes Rick Szostak, an economic historian at the University of Alberta. "Once the auto market was saturated, there weren't other products to pick up the slack."

In some ways, there are uncomfortable parallels between the 1920s and 1990s. Today, a single sector, high tech, accounts for about 25% to 30% of growth—much the way a single sector, autos, drove growth in the 1920s. And it was softness in auto sales, starting in the summer of 1929, that helped trigger the stock market crash, just as today's stock market plummets whenever tech sales sag.

But other lessons from the 1920s and 1930s offer some assurance. Most economists agree that the initial downturn in 1929 was greatly worsened by bad policy decisions—notably an increase in protectionism, combined with a tight-money policy at the Federal Reserve Board. Most central bankers now understand that the right immediate response to a financial crisis in an otherwise sound economy is to pump money into the financial system rather than take it out.

The second lesson is that a powerful technology boom need not be stopped even by a deep downturn. From 1929 to 1937—through the worst of the Depression and a weak recovery—labor productivity actually rose 1.1% a year. By comparison, the recessions of the 1970s and 1980s—during an era of slow technological progress—produced devastating declines in productivity.

Indeed, the next downturn will provide a stern test for the 21st Century Economy. If productivity falls sharply during the next recession, that will suggest that the recent gains were only a temporary spike, and that the skeptics were correct. But if productivity continues to rise, that will be a clear sign that the 21st Century Economy is a good bet.

By Michael J. Mandel in New York

(kick off your shoes)

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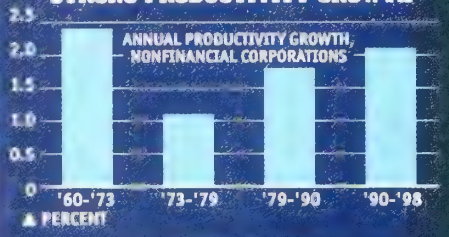
THE 21ST CENTUR

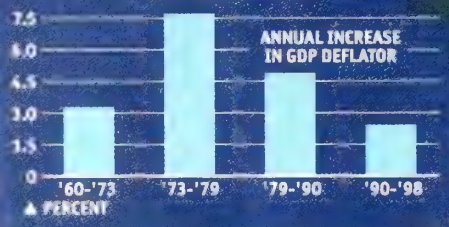
THE CYCLES

Over the course of the 1990s, the U.S. economy has surpassed the performance of the past two business cycles. Indeed, by some measures it is outpacing the 1960s and the early 1970s.

STRONG PRODUCTIVITY GROWTH

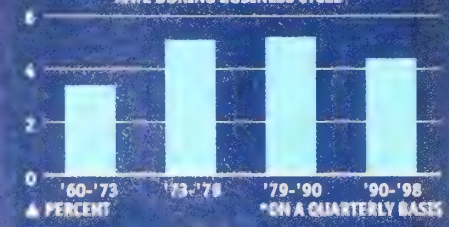


LOW INFLATION



A STRONG LABOR MARKET

THE LOW POINT FOR THE UNEMPLOYMENT RATE DURING BUSINESS CYCLE*



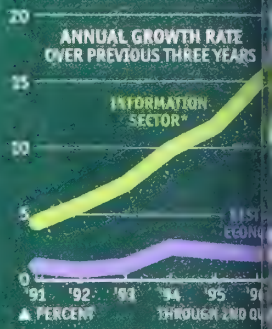
RISING PROFITS

DATA: BUREAU OF ECONOMIC ANALYSIS, BUREAU OF LABOR STATISTICS

TECHNOLOGY

The high-tech boom shows no evidence of stopping as the information sector becomes an increasingly powerful factor in boosting growth and reducing inflation. Going forward, the growing number of patents is a clear indication that the innovation pipeline is filling up—good news for the years to come.

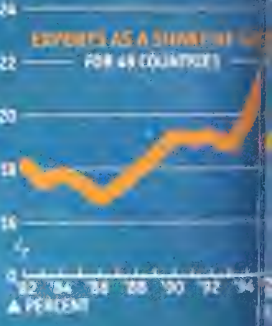
HIGH-TECH GROWTH



GLOBALIZATION

Expanding world markets are a key driving force for the 21st Century Economy. True, the severe slump in Asia points up the vulnerabilities of the global marketplace. But the long-term trends of fast-rising trade and rising world incomes still remain in place.

TRADE EXPLODES



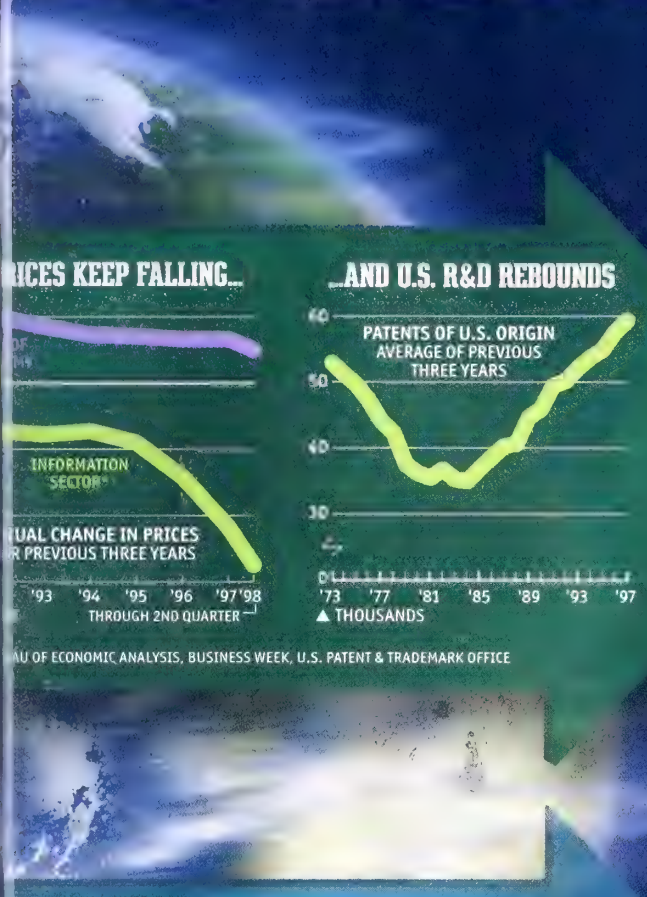
WHAT COULD GO WRONG

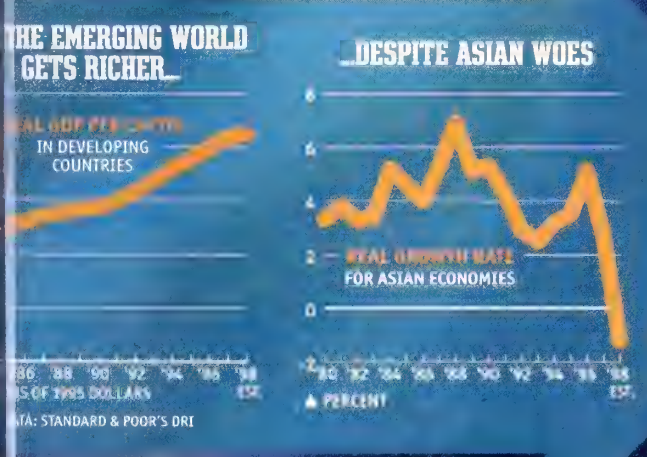
ASIAN MELTDOWN
A further worsening of the financial and economic crisis in Asia could badly damage the rest of the world. Most worrisome: A collapse of the Japanese economy.

STOCK MARKET CRA
A lengthy and deep decli stock market could slow by depressing consumer and making it more diffi businesses to raise mone

ECONOMY

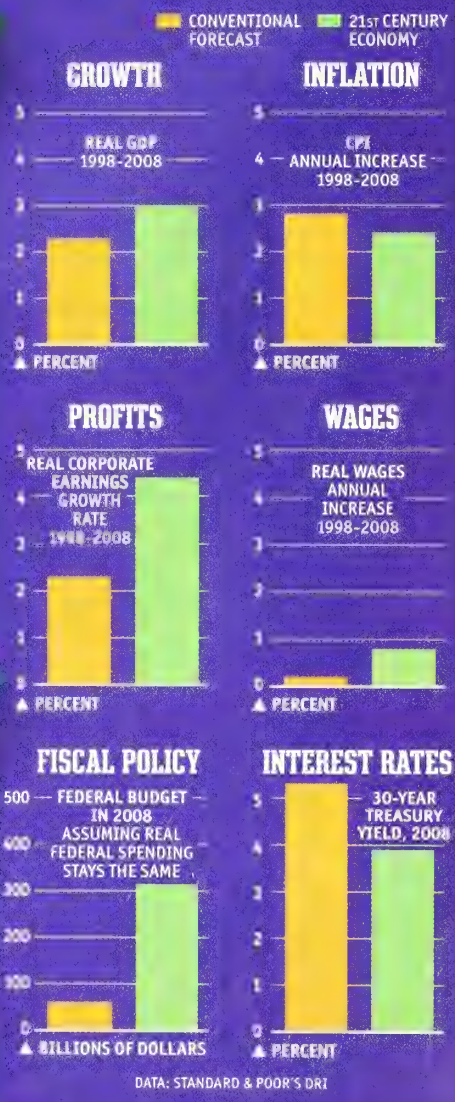
Rapid innovation and surging trade will pave the way for growth





THE FUTURE

What are the implications of 3% annual growth, rising productivity, and strong investment continuing over the next 10 years? At the request of BUSINESS WEEK, Standard & Poor's DRI compared this 21st Century Economy scenario with its baseline forecast, which calls for only 2.3% average growth.



LUMP

...ed slowdown in high-... because of market ...n or the absence of ...g new products could ...n the rest of the economy.

PEACE DISAPPEARS

Any one of a number of events—a nuclear dispute on the Indian subcontinent, say, or a breakdown of the Mideast peace process—could put a damper on world trade.

ILLUSTRATION BY DAVID RUDES/BW
CHARTS BY ROGER KENNY, JEAN WISENBAUGH

INTELLIGENCE BRIEFINGS

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The following article appears on S&P Personal Wealth, www.personalwealth.com, the interactive investment advisory service for the individual investor:

HOW MANY MUTUAL FUNDS DO YOU NEED?

With more than 6,000 mutual funds to choose from today, some people have started collecting funds as if they were art. While the variety of choices is impressive, there's a downside to holding too many similar funds: it may potentially lower returns on your portfolio.

highlights from S&P Personal Wealth

The number of funds that is right for your portfolio depends on your investment goals and the amount of your investment capital. If you have both short- and long-term goals, you will likely want different types of mutual funds for each time frame. The more capital you have to invest, the greater your ability to afford diversification among different asset classes and investment styles.

Asset allocation is the way in which you weight investments in your portfolio. There are three main asset classes: stocks, bonds, and money markets. Each has its own characteristics in terms of their value fluctuation, level of market risk, and ability to outpace inflation. Which asset classes you decide to invest in depends on how your investment time frame and goals match up with the risks and return potential of the various asset classes.

Diversification – investing in different types of funds or securities in order to reduce risk – is an important part of asset allocation. Diversifying among different asset classes increases the chance that as one investment is falling in value, another may be rising. A mix of assets will help position your portfolio to benefit during market upswings while suffering less during downturns.

If you have sufficient capital, you can also diversify among investment styles to help reduce risk. Active and passive investing are the two most basic investment styles. While active investors believe that managed funds have the ability to outperform the market, passive investors have faith in the long-term success of the market indexes. Many investors prefer to combine investment styles in order to potentially gain through different market cycles that favor different approaches.

Most financial planners suggest a minimum of three mutual funds if you have at least $2,500 to invest. These first funds would likely include a stock fund, a bond fund, and a money market fund. How much you invest in each fund will depend on your investment goals and time horizon.

With higher amounts to invest, you might consider adding a mix of different stock and bond funds. A long-term investor seeking growth who already holds a domestic large-cap stock fund, for example, could add a small-cap stock fund and an international stock fund without duplicating holdings. Following such a strategy of holding different types of funds, an investor with $25,000 to invest can achieve a well-diversified portfolio with just six funds.

However, if you hold several funds that all use similar investment strategies in your portfolio, you essentially hold the market. You could achieve the same result much more cost-effectively by simply buying an index fund.

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VISIONARY

ALAN GREENSPAN: AN UNLIKELY GURU

The Fed chairman sees a high-tech economy as a natural inflation fighter. It spurs faster—and longer—growth

Last summer, Federal Reserve Chairman Alan Greenspan stunned Wall Street by raising a provocative issue: Is the high-tech boom a "once or twice in a century phenomenon" that's altering the old rules for how the economy operates?

Coming from a central banker who epitomizes sober economic analysis, this question was remarkable. While Greenspan admits it may be another decade before the Fed fully understands the economic changes now afoot, he is increasingly convinced that huge business investments in new technologies allow the economy to grow faster—and longer—with less risk of inflation.

While the Fed chief eschews such buzzwords as "New Economy," he doesn't understate the significance of the changes. The current expansion, he said in June, is "as impressive as any I have witnessed in my near half-century of daily observation of the American economy."

Greenspan's conversion from inflation hawk to leading proponent of the new economic rules is having enormous impact on monetary policy. In the past, the Fed would have already slammed on the brakes to prevent an inflationary spiral. Over the past three years, by contrast, it has raised rates just once. And with Asia's economies still in free fall, Greenspan may decide that the Fed's correct course now is to provide liquidity to the rest of the world.

X-FACTOR. Even if Asia were to stabilize tomorrow, he may conclude that the economy's higher growth potential allows him to wait for more evidence of inflation before raising rates. Although Greenspan won't say precisely how fast productivity is rising, he believes it's somewhere above the 1% rate that the U. S. has averaged since the 1970s but below the 2% rate of recent quarters.

It's not just capital spending that's behind the productivity gains, in Greenspan's view. He also sees a parallel revolution in the workforce—an X-factor that may explain why wages haven't risen faster. Greenspan believes today's workers, seared by waves of downsizings, suffer chronic job-obsolescence fears. So they're more flexible, willing to learn new skills, and less prone to job-hop for a few more bucks.

Corporate managers, meanwhile, are smarter in how they invest in new machinery—boosting the "efficiency of capital," as Greenspan puts it—even while using new management practices to redesign their businesses. "Total quality management, customer satisfaction... we've got a whole generation of executives who are thinking differently," says Fed Vice-Chair Alice M. Rivlin, who agrees with Greenspan on this point.

Still, Greenspan hasn't let his guard down on inflation. While technology's potential may be limitless, the labor supply isn't. At current growth rates, he knows the economy will eventually run out of workers—and drive wages up. Indeed, Greenspan may agree to nudge rates up this fall if the economy shakes its summer slump.

But even a rate hike won't take away from Greenspan's amazing balancing act his ability to adapt to the pervasive ongoing changes in the economy while standing strong against inflation. In the end, his greatest legacy will be a high-growth, low-inflation economy.

By Dean Foust in Washington

Today's workers, fearing job obsolescence, are more flexible and willing to learn new skills, according to the Fed chief

GREENSPAN'S TAKE ON TODAY'S ECONOMY

PRODUCTIVITY Corporate America's heavy investment in computers and other labor-saving technologies is boosting productivity growth well above the trend of recent decades.

GLOBALIZATION The growth of the global economy, coupled with technological advances, enables companies to shift production easily around the world. That means fewer inflationary bottlenecks from capacity shortages.

THE ANXIOUS WORKER Globalization and corporate downsizings mean that employees put a premium on job security. They're also more willing to tie pay to performance—reducing the risk of wage inflation.

DATA: BUSINESS WEEK

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WAGES

A RISING TIDE

It's no longer just the elite who are gaining from the innovation boom. Wages are growing across the board—and that's no surprise

No novelty in the United States struck me more vividly during my stay there than the equality of conditions.
—Alexis de Tocqueville, 1835

The opening sentence from *Democracy in America* is a striking testament to how central the idea of equality has been throughout American history. Despite the nation's very real divisions along the lines of money, race, power, and education, America has been more egalitarian and open to talent than any other country in history.

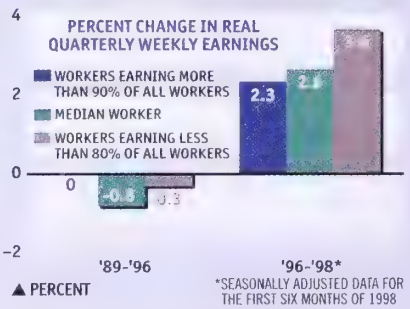
Yet economic inequality began rising dramatically a quarter-century ago. The average worker's paycheck couldn't keep up with inflation, and living standards stagnated for the bottom three-quarters of Americans. At first, the popular culprits behind these woes included the war against inflation—which cramped economic growth—as well as the decline of unions and the supply-side tax cuts of the early 1980s, which cut taxes—especially for the wealthy.

But as inequality continued to rise well into the expansion of the 1990s, a growing number of economists and intellectuals of both the left and the right pinned the blame on the two most powerful economic forces of our age, global competition and breathtaking technological change. High-tech gear transformed the workplace by taking over many routine, low-skill chores and leaving employees to perform the more complicated, high-skill tasks. The income gains largely went to the well-educated elite, expert at handling abstract concepts or doing business overseas. In 1979, median compensation for male college graduates was 42% higher than for male high school graduates. Nearly two decades later, workers with a college sheepskin pocketed 89% more than their less-educated peers. Little wonder more and more people worry that America is evolving into a two-tier society permanently divided between a technological plutocracy that will enjoy most of the economy's bounty—

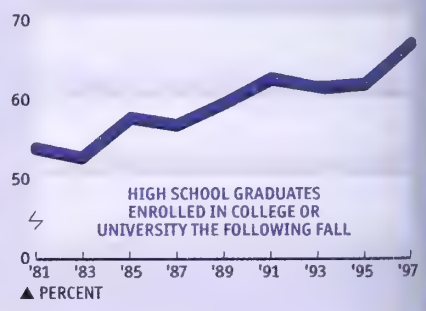
SIGNS OF VITALITY

As Wages Head Higher...

...The Wage Gap Is Narrowing...



...And Education Levels Rise



DATA: BUREAU OF LABOR STATISTICS, ECONOMIC POLICY INSTITUTE, EDUCATION DEPT.

Lukasa

and everyone else, who will struggle to make ends meet.

But the 21st Century Economy likely will avoid such a grim future. Indeed, the benefits of the innovation boom are just beginning to boost all worker incomes. Real wages for the median worker rose at a 2.6% annual rate from 1996 through the first half of 1998, reversing the decline of 0.8% a year from 1989 to 1996, according to the Economic Policy Institute. The gains were greatest among lower-paid employees. With the economy continuing to expand and unemployment at its lowest point in 30 years, companies are snapping up minorities, women, seniors, and anyone else willing to work for a day's pay. Wages for workers in the 20th percentile—those earning less than 80% of all workers—increased at a 3.6% annual rate during this period. Meanwhile, workers in the 90th percentile—those making more than 90% of all workers—saw their wages grow at a 2.3% pace. What's more, the rapid economic growth promised by unleashed innovation will keep unemployment unusually low after adjusting for the inevitable effects of the business cycle. "Everything I have seen suggests that inequality shrinks with a low unemployment rate," says James K. Galbraith, an economist at the University of Texas at Austin.

ANACHRONISM. The downside? A souped-up economy means intense job insecurity from the warehouse floor to the white-collar office. It's clear already that poorly educated workers will continue to lose ground. Less appreciated is how today's tech-savvy, well-compensated worker could become an expensive anachronism as tomorrow's technological advances offer new opportunities for slashing costs and improving economies of scale. A world filled with smart computers, all linked via the Internet, could easily undermine whole sectors of today's vibrant service and information industries. In the next century, lawyers, accountants, and brokers could be the secretaries, bank tellers, and mainframe operators of the 1980s. Worries T. Brock Hinzmann, chief technology navigator at consultant SRI International: "What if you off-load services from people altogether? I'm not talking just about simple technology like speech recognition—what if it includes creativity?"

The current association between economic inequality and technological breakthroughs is far from unique. Whenever major innovations take hold, income gains typically go to better-educated workers, who can quickly master the new techniques and technologies. But history suggests that the payoff spreads as more people move up the learning curve and as additional innovations make the new technology easier to use.

Look at what happened at the turn of the century. Innovations transformed the economy as industry exploited scientific research and modern management as never before. Entrepreneurs built their companies into behemoths, thanks to the new techniques of mass production, the spread of electric power, and the rise of the internal combustion engine. Income inequality worsened as managers bid up the wages of scarce educated workers to staff the offices of their national and multinational enterprises. Yet by the 1920s, the wage premium for secondary education had declined considerably, according to research by Claudia Goldin and Lawrence F. Katz, economists at Harvard University. Education levels rose sharply as high school graduation rates jumped from around 13% in 1913 to almost 50% by 1940. Technological advances such as typewriters and mimeograph machines made many office jobs easier. More important: All groups eventually saw their wages rise and living standards improve as productivity rose at a fast clip.

The same thing seems to be happening today. A study by Katz, David H. Auter of Harvard, and Alan B. Krueger of Princeton University attributes 30% to 50% of the increase in demand for skilled workers over the past 25 years to the computer. But the talents of the American workforce are increasing even as high-tech companies create new products

that don't require specialized knowledge to operate. Far from being left behind, most working- and middle-class Americans—especially from the younger generations—are learning what it will take to prosper in the years ahead. "People have a sense of what skills employers are looking for, and they are responding by going to school and getting training," says Harvard's Goldin. Adds Richard Howard, director of the Wireless Research Laboratory at Lucent Technologies' Bell Labs: "Technology goes through this cycle. You start with something simple, it goes through complexity, and then it goes back to being relatively simple."

VOICES Claudia Goldin

TITLE Economics professor, Harvard University. 52.
CONTRIBUTIONS Goldin has provided a historical basis for understanding the impact of technology on income distribution. Living standards have improved over the past century, she argues, but the gains haven't always been shared equally.
IN HER WORDS "[There is] a constant race between technology and education. At times education is ahead, and sometimes the technology curve is ahead."

Clearly, the evolution of technology is transforming work at an astonishing rate. And labor is responding to business' near insatiable demand for educated workers. Last year, a record 67% of high school graduates went on to college the following fall, compared with 49% in 1979. The proportion of people between 25 and 29 years old who have a bachelor's degree increased from 21.3% in 1981 to a record 27.8% in 1997. Enrollment at community colleges is strong, as is enrollment at private schools that upgrade workers' skills.

Indeed, the idea that only PhDs in computer science and their like will benefit from the technological revolution is clearly wrongheaded. Emily R. Geballe, 40, was a rock musician in Los Angeles. She was in the music scene for years, playing bass guitar and working at retail jobs to make ends meet. Tired of struggling to make a living, she took a two-year course in computer

Far from being left behind, the working and middle classes are reacting to the high-tech boom by getting training so they can prosper in the years ahead

gramming at a community college in the early 1990s. Geballe lives in Seattle and troubleshoots customer technical probs for WRQ Inc., a Seattle-based software and Internet com- with 700 employees worldwide. She owns a home and a vacation in Europe last year. "Life is good," she says. Companies also are devoting more resources to worker ning. Greg Surdyk, 29, is taking advantage of his company's ingness to pay for his continuing education. In his early Greg worked as a part-time supervisor at United Parcel vice and helped his mother run a bar she owned in Cicero, Three years ago, he started attending DeVry Institute of Technology while working part-time in a warehouse. Now, he's a programming network/PC support specialist for an industrial supply company in Elmhurst, Ill. In the fall, he intends to get certified as a Microsoft systems engineer, a process that will take three months: His company will pay the $5,495 cost. "With certification and two years experience, you can get $65,000 to $70,000," he says. "If I hadn't found computers, I'd still be at UPS. Instead, I'm financially better off and have much more job satisfaction."

EQUALIZER. In one area, technology already has become a powerful force for greater equality: Women are doing better than ever. For instance, it's a lot easier for men and women to compete on an equal footing when they're working with high-tech equipment such as computers than when they're toiling on an auto assembly line. Moreover, a majority of associate, bachelor's, and master's degrees are now earned by women. The ratio of women's median pay to men's, which hovered around 60% in the late 1950s, had reached more than 75% in 1997. The gap narrows even more after adjusting for education and occupation, according to the Council of Economic Advisers.

Throughout American history, successive generations have been able to climb higher up the economic ladder than its parents. Robust productivity growth is the fundamental building block allowing each generation to get ahead. And that is what made the stagnant productivity in the 1970s and 1980s so painful for so many people. Simply put, economic growth was too weak to create enough opportunities for people to fare better than their parents. But with the economy on a fast track, that's no longer true. Living standards already are improving. More than 25% of all workers now own stocks and bonds though a retirement savings plan such as a 401(k). Better yet, a record 66% of households own the homes they live in, and many of the goods inside the house come cheaper. For example, since 1994, prices for household appliances have fallen 3.5% and home electronic equipment is down 4.1%.

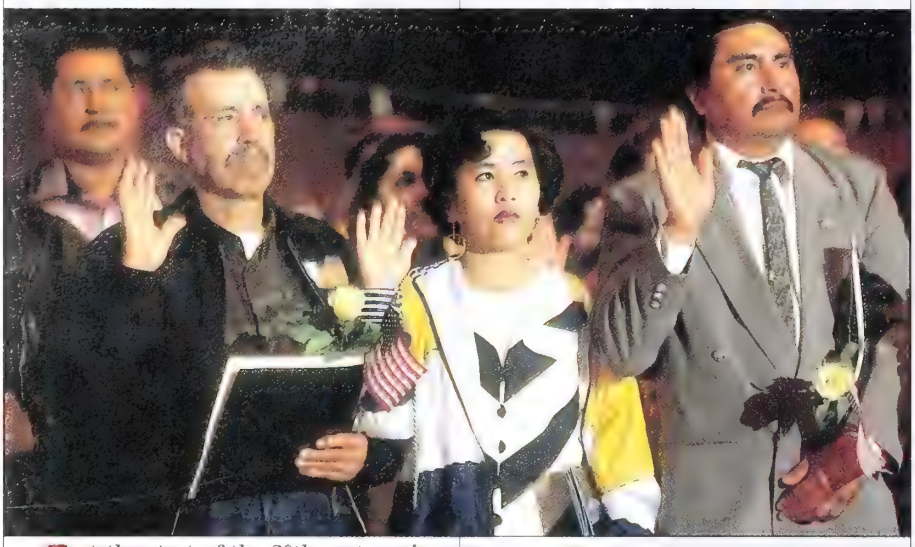
Still, in an economy driven by innovation, it's clear that restructuring, reengineering, and downsizing—pick your favorite buzzword—will be a permanent part of management's tool kit in the 21st century. Employees will have to keep learning new skills with each new upheaval. "The types of risks that used to be confined to the blue-collar workforce are beginning to spread their tentacles into the necktie class," says Bradford de Long, an economist at the University of California at Berkeley.

In spite of such insecurity, most Americans will share in the prosperity unleashed by today's technological advances. Tremendous economic growth will lift the incomes of all American families. And a future de Tocqueville touring this nation surely would be struck at the enormous opportunities for the average citizen in the 21st century economy.

By Christopher Farrell in St. Paul, Minn., with Ann Therese Palmer in Chicago and Seanna Browder in Seattle

IMMIGRANTS

A RICH STEW IN THE MELTING POT



NEW WORKERS The U.S. economy will depend on immigrant labor

At the start of the 20th century, immigrant labor and innovation helped turn the U.S. into a powerful manufacturing nation. Today, foreign-born engineers jam the corridors of Silicon Valley, abetting the nation's information-technology boom. And as the 21st century dawns, yet another wave of immigrants will once again help transform the economy.

During the next decade, barring a change in government policy, nearly a million immigrants are expected to arrive in the U.S. every year. Most, both legal and illegal, will continue to come from Latin America and Southeast Asia, but every foreign land will be represented. So will every level of skill, education, and talent: New arrivals will make up hotel beds, start their own shops, and pursue pathbreaking medical research.

CREATIVE TYPES. And they'll play a critical role in providing the workers needed to keep the economy healthy. As baby boomers age and domestic birthrates stagnate, only foreign-born workers will keep the labor pool growing. By 2006, in fact, immigrants will account for half of all new U.S. workers; over the next 30 years, their share will rise to 60%.

Economic dynamism, in other words, will depend on a continuing stream of foreign-born workers. A limited labor supply "is going to affect growth," says Carol D'Amico, senior research fellow at the Hudson Institute; "if you fast-forward 10 years, it will be a real issue." Even at current levels of immigration, according to the Labor Dept., the number of people available to work will increase by a mere 0.8% per year between 1996 and 2006—half the rate of the previous decade. Without immigrants, according to a new study headed by the Urban Institute's Jeffrey S. Passel, the U.S. workforce would actually begin to shrink by 2015.

It's not all about sheer numbers, of course: To lift productivity and spur growth, immigrants must provide creativity, entrepreneurial energy, or simple initiative that America couldn't find otherwise. "If all you did was bring in people who are exactly the same as those we have here, there would be no economic benefit," says Rand Corp. economist James P. Smith. "You'd just have more people."

That's what makes immigrants such as Nick Gutu so important. Gutu, who defected from Romania in 1969, started as an assembly line worker for Ford Motor Co. and later struggled to make ends meet as a busboy, bartender, and cab driver. A decade after he arrived in the U.S., Gutu started a construction company in Chicago. Now, he also owns a real estate firm and a window manufacturer. He employs 65 people—many immigrants themselves. "You can be anything, depending on the amount of courage you have," he says.

Just as crucial, the array of education and skills immigrants bring could fit neatly with the supply of jobs over the next decade. According to Linda Levine at the Congressional Research Service, a branch of the Library of Congress, 60% of the jobs created through 2005 will require some post-secondary education. But, she adds, low-skill jobs will still represent about half of total employment.

QUICK STUDIES. Compare that job market to the prospective immigrant labor force. Of recent arrivals, only 63% have finished high school. No surprise that, while immigrants make up only 12% of today's workforce, they bus half the restaurant tables in the U.S. Yet immigrants also are 50% more likely than Americans to have a graduate degree. And a staggering 23% of U.S. residents holding PhDs in science and engineering are foreign-born, according to the National Science Foundation. Thus, one-third of all male physics teachers are immigrants as are a quarter of all female doctors, says Portland State University demographer Barry Edmondston.

Indeed, foreign-born workers have shown an extraordinary ability to assimilate and flourish. Certainly, some less skilled workers will remain at the bottom economic rung all their lives. Yet others will catch up quickly. Within a decade of their arrival, the well-educated go from making barely half that of native-born Americans in comparable work to nearly 90%, according to a recent study by Mark C. Regets of the National Science Foundation and Harriet Duleep of the Urban Institute.

That, of course, will raise immigrants' living standards, delivering foreign-born workers and their families into America's middle and upper classes. More important, it will help drive innovation and entrepreneurship, key engines of the 21st Century Economy. And the resulting growth will keep attracting more Nick Gutus.

By Howard Gleckman in Washington

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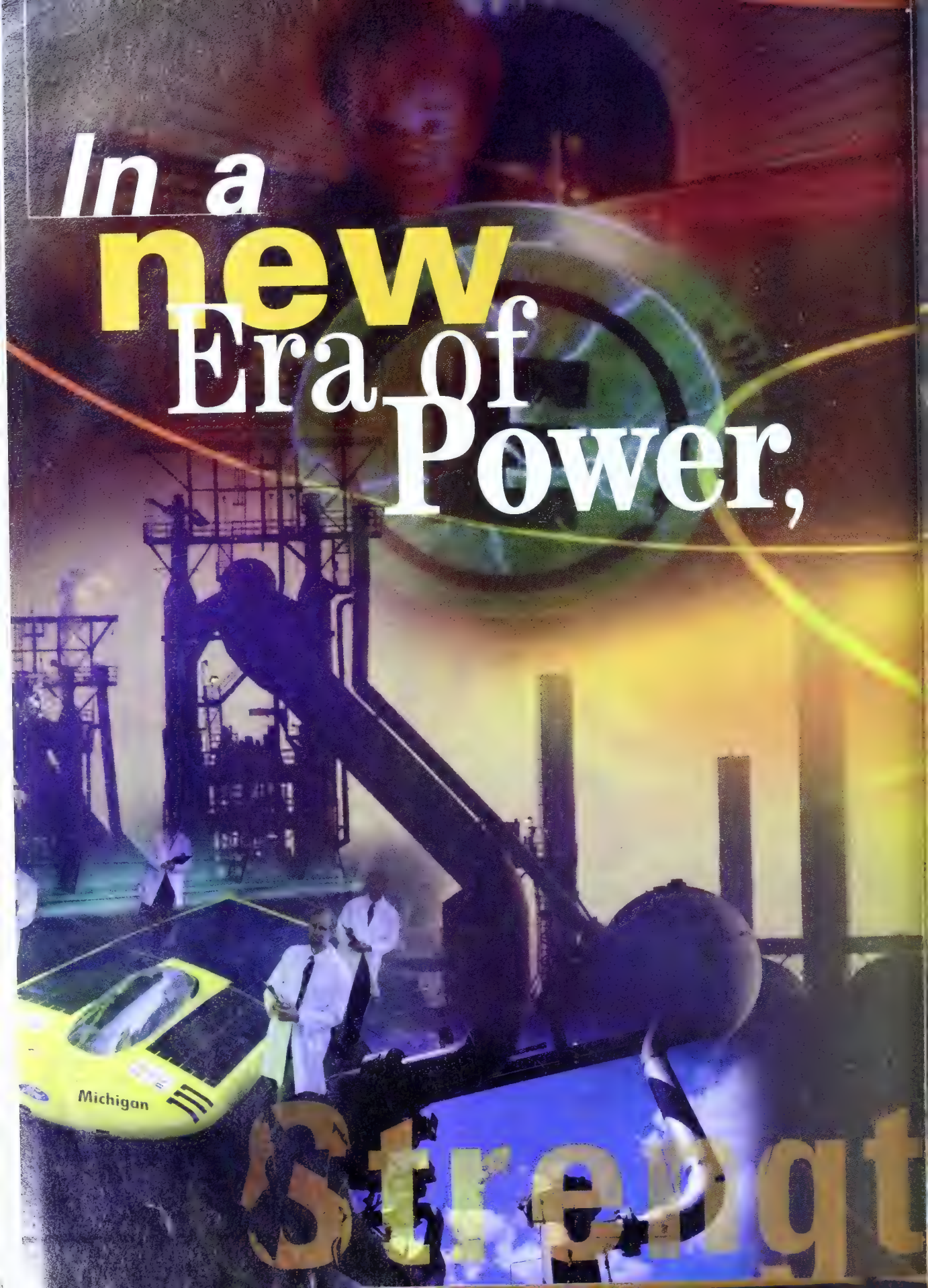
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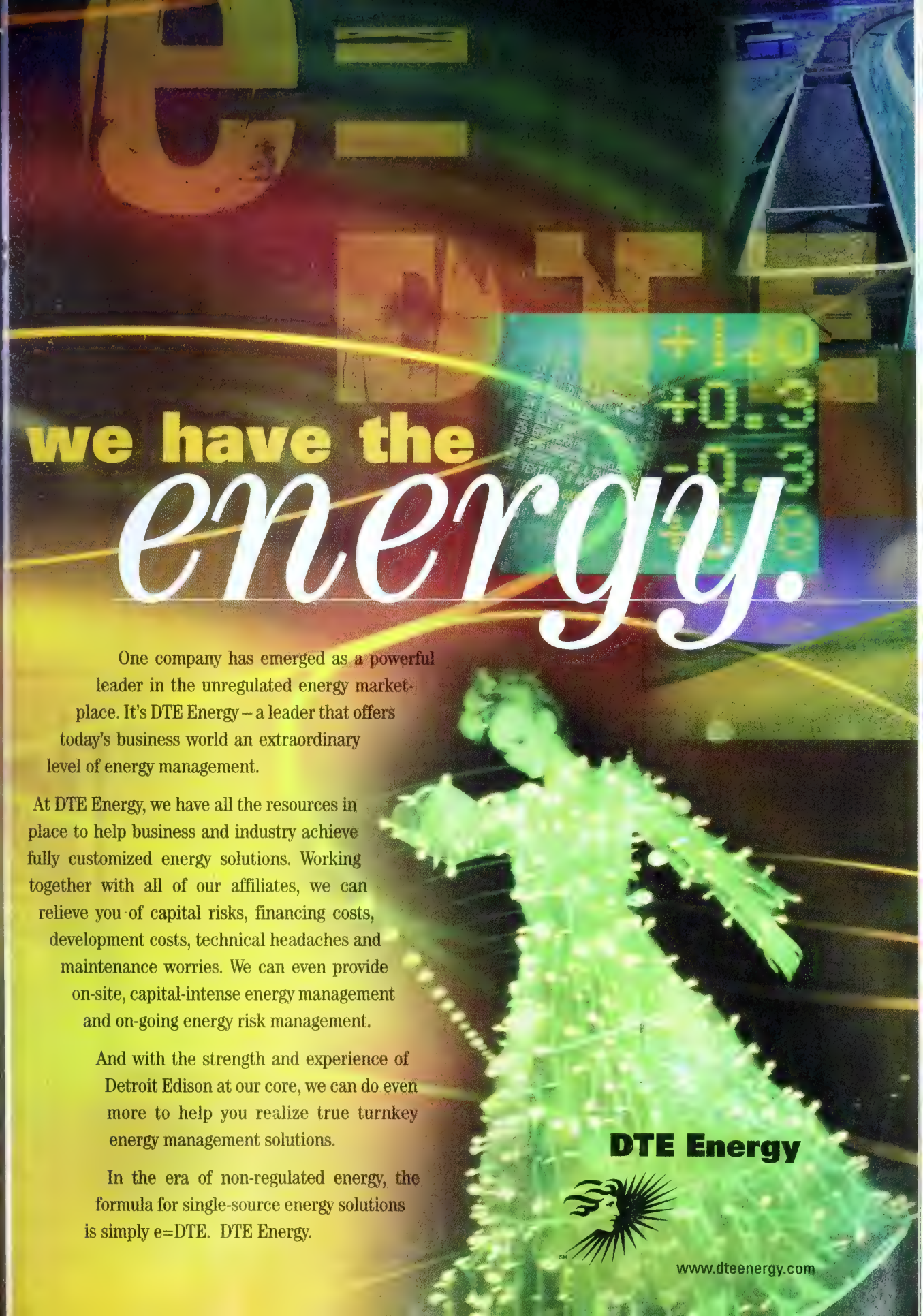
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TECHNOLOGY

THE NEXT WAVE

One day, scientists will be able to create materials atom by atom. The upshot: Doing everything nature can do, and more

Silently and efficiently, the new team member toils away in a chemistry lab at the University of California at Santa Barbara. With perfect precision, she lays down an ultrathin layer of an organic substrate. Onto this, she deposits interlocking calcite crystals, atom by atom. The two layers bond into a delicate crystal lattice. Under a microscope, it calls to mind the flawless thin-film layers on a silicon chip.

But there is no clean room, vacuum chamber, or chip gear in this lab, where professors Galen D. Stucky and Daniel E. Morse brainstorm new materials. For that matter, the "team member" is no ordinary staff researcher. She's a mollusk—an abalone. And like so many of nature's creations, she has acquired, through millions of years of evolution, an exquisite form of molecular machinery to create her shell—machinery that leaves today's best fabrication tools in the dust.

At Santa Barbara and hundreds of other research centers, scientists and engineers are getting ready for the next great technological revolution—the leap into the world of the very small. Nature has an unrivaled genius for designing and producing tough, versatile materials—from seashells to spider's silk—in self-replicating "factories," and at an atomic scale. Scientists want to clone this ingenuity, to forge new industries of the 21st century. "Atom by atom—that's how nature designs and builds things," muses Cherry Murray, Physical Research Lab director at Lucent Technologies' Bell Labs. "If you could influence design at such a scale, you could make any material you ever wanted."

BYE BYE PC BUGS? That ultimate goal is still mostly a glimmer. But the high-tech landscape is on the brink of change. The development pipelines at many high-tech companies already showcase a whole new breed of miniaturized marvels with capabilities well beyond today's chips. Over the next half-decade, these so-called "microelectromechanical systems" (MEMS)—which combine sensors, motors, and digital smarts on a single sliver of silicon—are likely to supplant more expensive components in computer hardware, automobile engines, factory assembly lines, and dozens of other processes and products. The operating software for these devices, now in the process of being written, is expected to suffer neither the bugs nor the bloat of today's PC programs.

Going somewhat further out—probably 15 to 20 years—high-tech visionaries foresee a transition that's far more radical and disruptive. Its quintessence won't be smaller, cheaper, faster electronics—though we will have all that in abundance. The transition scientists speak of involves nothing less than the hijacking of nature's own creative machinery.

In medicine, this spells the ability to repair or replace the body's failing organs. In manufacturing, it means coercing molecules to assemble into useful devices—the same way that crystals and living creatures assemble themselves. The coming wave of miniaturization and molecular electronics—sometimes called "nanotechnology"—is taking shape at the intersection of chemistry, physics, biology, and electrical engineering. And if it crests as many scientists predict, it will bring a wholesale industrial transformation, more dramatic than the late-20th century flowering of microelectronics.

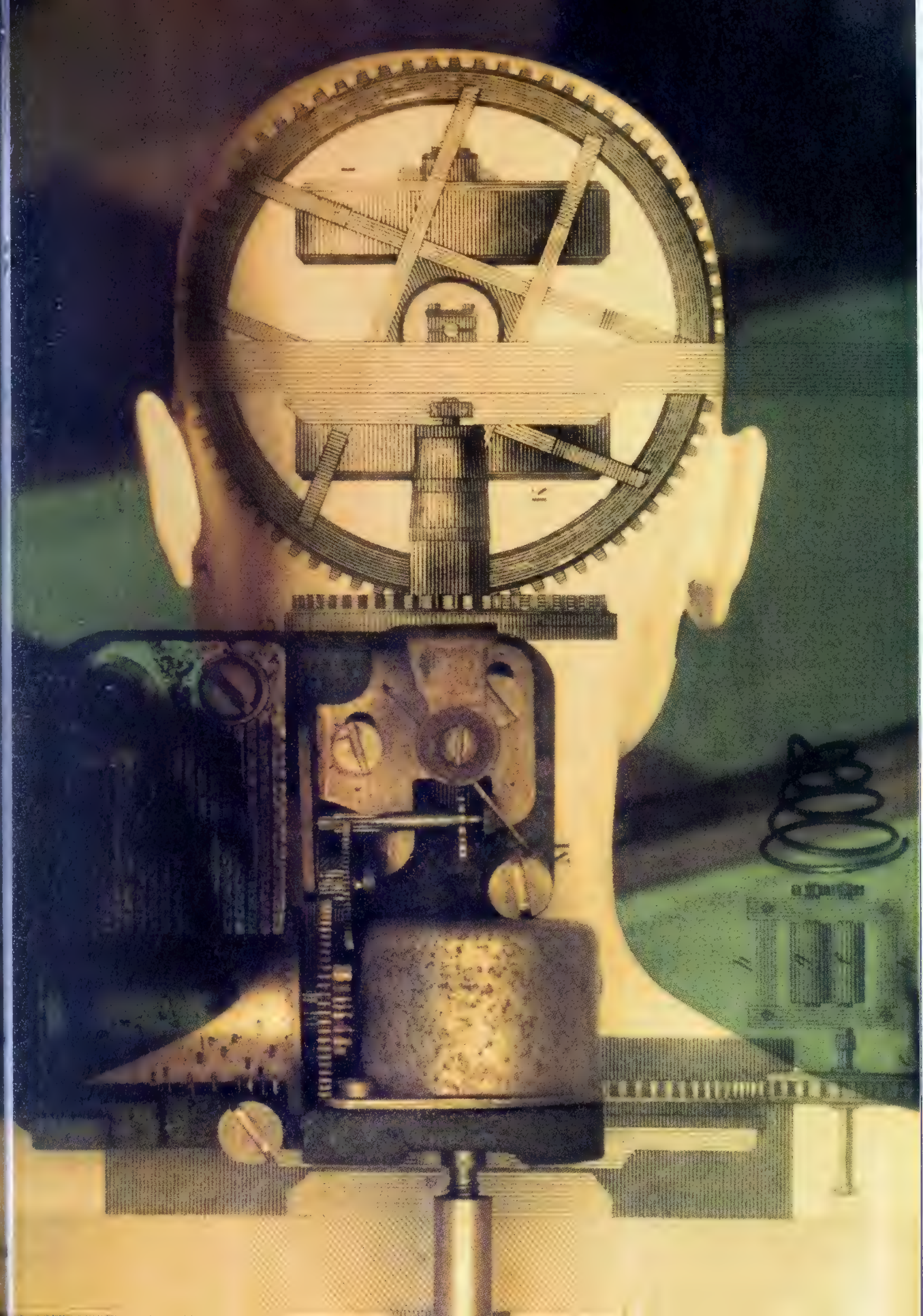
No one dismisses the enormity of the challenges. Atoms, at room temperature, inhabit a turbulent world ruled by forces we don't fully understand. Today's best theories, scientific instruments, and computer simulations provide only imperfect access to this domain.

Why, then, do so many scientists believe in a Molecular Revolution? Because some of the necessary capabilities are already within reach. As scientists at Bell Labs figure it, the widths of the circuit lines that make up electronic elements of chips will shrink 80%, to just 50 nanometers, by 2010. That's 50 billionths of a meter—the distance of about 300 atoms tethered in a row—and roughly the thickness of the protein layers in the abalone's shell.

In other words, engineers are already plunging deep into nature's hidden preserve. And in life sciences, they've gone even further. Biotechnologists can tailor antibodies that fight cancer. And they can slip new genes into plants or animals, to produce plastics or drugs (page 86). Nano-engineers believe they can build on this base, and write new recipes or script

GETTING SMALL IN THE NEXT **HALF-DECADE**

SILICON CHIPS WITH MICROSCOPIC SENSORS, MOTORS, AND OTHER MOVING PARTS ARE LIKELY TO SHOW UP IN COMPUTER HARDWARE, CAR ENGINES, ASSEMBLY LINES, AND **DOZENS** OF OTHER PROCESSES AND PRODUCTS.



that will instruct unruly atoms to form desired materials. The first successes—though not quite at the atomic level—are already visible. Bell Labs boasts of chips that literally pick themselves up off a substrate. And at the University of Rochester, researchers coax polymeric molecules to form hollow cylinders and solid rings. Once perfected, such devices alone stand to bring enormous savings to many industries. Says Venkatesh Narayanamurti, dean of the engineering college at UC-Santa Barbara: "The Internet is nothing compared to what's coming."

QUAKE WARNINGS. The shifting economics are already evident with the arrival of MEMS. Early mass-produced applications include tiny automobile accelerometers, which trigger air bags in a crash, and a host of other industrial sensors. But as sketched out by Sandia National Laboratory's MEMS research chief, Paul J. McWhorter, the next wave will be far more dramatic. Deployed in networks, MEMS will sense one another and configure themselves to perform information-processing tasks. In the not-so-distant future, MEMS will steer our planes, monitor our health, and warn us of earthquakes, faulty aircraft parts, or cracks in bridges.

Since most MEMS chips have less circuitry than memory chips or microprocessors, they can be fabricated inexpensively on older chipmaking lines. That signals the first stage of a whole new paradigm for technology evolution, says Bell Labs' Murray. In the past, breakthrough devices carried a premium when they hit the market, and they were deployed sparingly. But with MEMS, Murray says, from the beginning, "you can manufacture in high volume at low cost. This has the potential to break down the old economic order."

Telecom, she says, will be an important testing ground. At Lucent, Siemens, and Tellabs, engineers want to shrink whole hunks of the next-generation telephone and data networks onto MEMS, possibly beginning in as little as two years. The arena they have targeted is a new mode of high-speed optical transmission called wave division multiplexing, in which a single beam of light is split into multiple colors, or channels, and zipped through fiber. Lucent's Bell Labs already has shown how today's pricey prototypes could be replaced by tiny microscopic mirrors sculpted onto MEMS. Combine that with satellite technology, and long-distance communications costs drop to zero. "This changes how meetings are conducted, how banking is done, how information is transported, everything," Murray says.

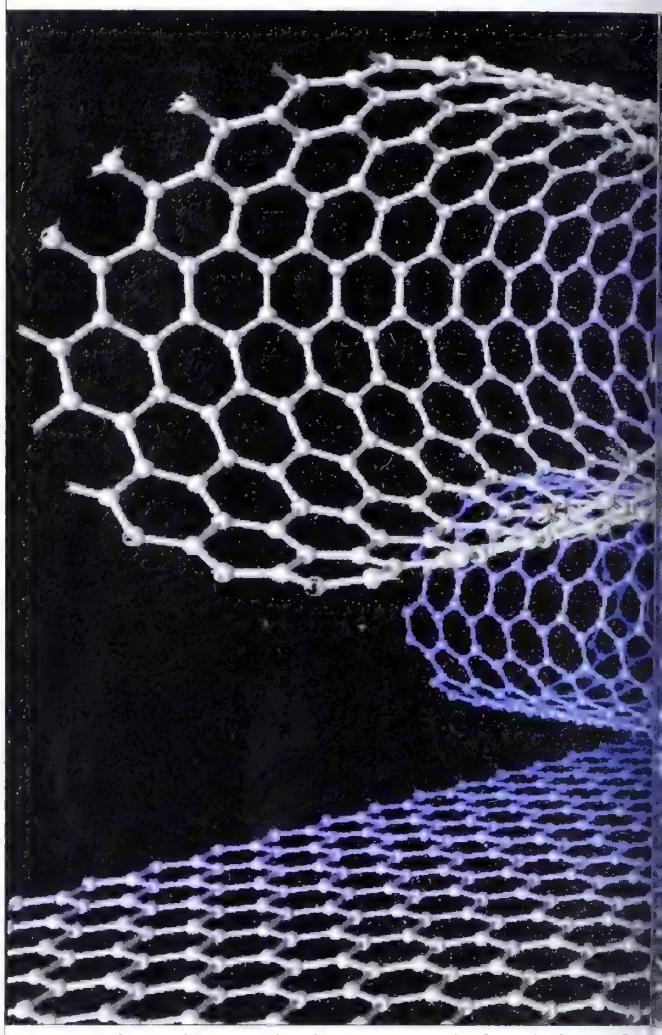
Wireless MEMS offer similar promises. At the University of California at Los Angeles, a team of 50 researchers is working on single-chip MEMS radios that could replace the $500 cards used in today's wireless data networks. In about five years, says William J. Kaiser, chairman of UCLA's electrical engineering department, all PCS and palmtop computers will come with radio MEMS. "And they'll be embedded in the ceiling in your office cafeteria, your hotel room, your airplane," he predicts, "all of them seamlessly linked to the Internet."

Around the same time, says California Institute of Technology physics professor Michael L. Roukes, vast numbers of wireless MEMS could be deployed as seismic and metal stress sensors, in patient-monitoring systems in hospitals, and a communications systems on satellites. "This is absolutely no science fiction," Roukes insists. "It's here and now."

In computing, disk storage capacity could be increased hundred-fold by a MEMS-based instrument called an atomi force microscope (AFM). Such "probe" microscopes, invented a IBM and Stanford University, produce images of atoms b dragging a superfine needle over a surface (above). But thes new probes also enable data storage o a near-atomic scale, since they ca nudge atoms from one position to ar other. It's a painstaking process, toda But researchers can speed it up by clus tering hundreds of microscope tips o the same silicon device.

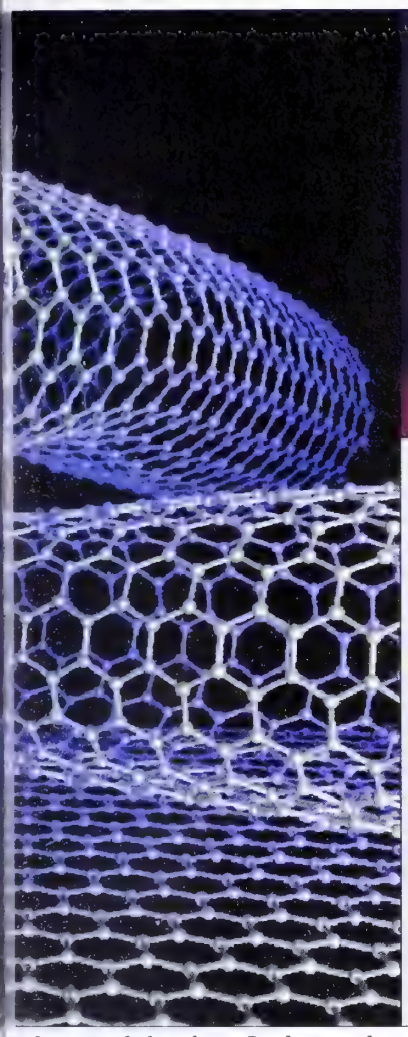
Health care is another beckonin frontier for MEMS—and its economic closely mirror those of the computer in dustry. Lawrence Livermore Nationa Laboratory has developed a MEMS alternative to today's mu tithousand-dollar DNA sequencers. Its parts can be produce for less than $100. And the same notebook-size box can als include a miniature blood analyzer. Blood analyzer chips coul continuously monitor an out patient's blood and radio th doctor at the first sign of a crisis.

Sturdier, more aerodynamic airplanes are another big goa By studding the back and wings of a plane with thousands MEMS-size flaps, engineers can alter the lift and drag



VOICES **Richard Smalley**

TITLE Professor of chemistry and physics, Rice University. 55.
CONTRIBUTIONS After sharing the 1996 Nobel Prize for discovering carbon 60 molecules, or "buckyballs," he's working with elongated forms called carbon nanotubes. These could be the basis for chips with circuits the size of single molecules.
IN HIS WORDS "Nature creates enzymes that are precise down to the last atom. But she doesn't make buckytubes. Maybe we are nature's way of making these."



CONQUERING UNIMAGINABLY SMALL WORLDS

Scientists are learning how to manipulate individual atoms—a brand of alchemy that, if fully realized, could dramatically reshape the economy. One early development: THE ATOMIC FORCE MICROSCOPE, invented at IBM and Stanford, with a tip that tapers to the width of a few dozen atoms (pictured above at 2,500 times its actual size). When heated, it can burn up to 100 billion tiny pits into a square inch of plastic—yielding storage disks with 150 times the capacity of today's CD-ROMs.

But atom-level technologies have applications that go far beyond data storage. Scientists at Rice University, Harvard, and elsewhere have attached SUPERSTRONG CARBON NANOTUBES (computer image, left) to microscope tips to probe and manipulate features on cells. Eventually, engineers may prompt nanotubes to assemble themselves into fantastically small electronic devices, far faster and smarter than today's chips.

tely control the plane. In theory, planes with MEMS would-
ely so much on wear-prone rudders, wing flaps, or tail el-
ors. The concept has been proven in wind tunnels. And
nilitary's Defense Advanced Research Projects Agency
PA), which is seeding MEMS research to the tune of $47
on a year, is now test-flying one-seventh-scale planes.

ANT DREAMS. DARPA is interested in military applica-
, such as radio MEMS that can assemble themselves into
orks in a battle or crisis situation. "You drop them off
back of a truck, they find each other, and establish com-
ication links," says Albert P. Pisano, director of DARPA's
s program. In addition, DARPA is spending millions on so-
d microbot planes that would be outfitted with MEMS
ors to detect biochemical weapons or relay images of
ny positions.

it in business environments as well, such devices can
huge efficiency gains. Office networks wouldn't need
e configured manually—they could
mble themselves right out of the
Laptop computers and cell phones
built-in radio MEMS and GPS cir-
will always know exactly where
are, and how to connect to the
est Internet backbone. MEMS also
be assembled into more complex
tic organisms. Kristofer S.J. Pis-
an electrical engineer at UCLA, and
Vanderbilt University mechanical
engineers are among those who are developing insect-like robots, which one day will be able to handle assembly jobs in electronics factories, for example, or hunt for survivors in collapsed buildings.

To be sure, the vision of nanotechnology purists—teaching smart devices to assemble themselves from the ground up, atom by atom—is still a distant dream. As Caltech's Roukes puts it, "The only true nanotechnologist today is Mother Nature." But slowly, humans are learning to mimic her handiwork. For example, by vaporizing carbon in vacuum chambers, Rice University physicist Richard E. Smalley and his colleagues create atomically perfect carbon nanotubes that don't exist in nature.

NO RETURN. The tubes are chemically stable, about 100 times tougher than steel, and scientists have just begun to explore their possible applications in industry. This summer, a Dutch research team turned one of Smalley's nanotubes into the world's first single-molecule transistor functioning at room temperature. Just 4 to 5 atoms in diameter, the circuit shattered a size barrier that ordinary silicon devices can't hope to cross, and it offered the first physical proof that atom-scale electronics are feasible. IBM has also demonstrated carbon nanotube transistors.

How far off is a commercial device? Smalley admits that going from one experimental carbon transistor to one trillion of them on a chip is a staggering challenge. "We have good days and bad days," he says.

That phrase perfectly expresses the zeitgeist of nanotechnology at the turn of the millennium. But few scientists seem inclined to turn back. The results will be a big surprise to economists who believe that industry already has reaped all the easy benefits of the Information Revolution. The revolution has barely begun.

By Neil Gross and Otis Port in New York

VOICES | Cherry Murray

TITLE Director, Physical Research Lab, Lucent Technologies' Bell Labs. 46

CONTRIBUTIONS This year, her lab has unleashed a flood of innovations, from exotic lasers to tiny telecom devices known as optical MEMS. The latter could go commercial in two years.

IN HER WORDS "MEMS could have a huge impact on optical networking. And they'll come in at the low end, not the high end. That's the disruptive part."

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RESEARCH

'WE ARE NOW STARTING THE CENTURY OF BIOLOGY'

Already, genetic engineering is transforming medicine and agriculture—and that's just scratching the surface

Late last year, scientists at Massachusetts Institute of Technology laid bare an intricate twist of the AIDS virus using the latest advances in a powerful technique known as X-ray crystallography. HIV, they found, attacks our cells like a miniature Captain Ahab, using a molecular harpoon to breach their defenses.

New research technologies are vastly accelerating the pace of discovery in biology, driving forward not only medicine but also industry, environmental cleanup, and agriculture. Scientists are unlocking biochemical pathways in cancer, clogged arteries, and Alzheimer's disease. Not only are they understanding life, they're manipulating it. They are slipping new genes into people to treat disease and genetically engineering plants and animals to boost yields or transform them into bio-factories of plastics and drugs.

Add it all up, and just as information technology undergirds today's booming economy, biology may drive tomorrow's. In fact, biology could transform information technology through such developments as DNA-based computers and software that repairs flaws as nature does. "We are now starting the century of biology," says J. Craig Venter, president of the Institute for Genomic Research and pioneering gene finder.

The potential payoff is huge. Corn yields could double, for instance. And science could eventually find ways to stave off heart disease and cancer, which account for $232 billion of the nation's $1 trillion annual healthcare bill. "We have a chance to achieve incredible economic benefits," says Henri A. Termeer, president and CEO of biotech company Genzyme Corp., at a recent Senate hearing.

BUG BUZZ. Not everyone agrees that the new era of biology will be an economic boon. Pessimists focus on the cost of medical technologies and the burden of the aging. "We could have an entirely new set of problems caused by generations of healthy humans who refuse to die," speculates Dr. William B. Schwartz, an economist and professor of medicine at the University of Southern California, in his new book, *Life Without Disease: The Pursuit of Medical Utopia.*

Biological science and technology are forging ahead even as the economic debate simmers. The coming wave of innovation could wipe out many age-old scourges, scientists predict. Already, research centers such as Venter's have read the entire DNA codes for the bugs that cause cholera and tuberculosis, opening the door to better treatments and vaccines. "It gives me tremendous hope that we can finally win the battle against bacteria," says Venter.

The discovery of thousands of human genes and biochemical pathways has "transformed the pharmaceutical industry," says George Poste, chief scientific officer at SmithKline Beecham Corp. "Companies have gone from having so few targets [for drugs], which were guarded like Fort Knox, to being awash in targets." Even greater gains will come when scientists better understand humans' genetic differences. "The sequences of people are 99.9% the same—and the 0.1% that's different will revo

Just as chips, computers, and communications propel today's booming economy, biology may be the driver of tomorrow's

FIELD OF DREAMS Growing genetically engineered corn in Kansas

nize medicine," says geneticist Dr. id R. Cox of Stanford University. sing so-called DNA chips being de- ped by companies such as Affymetrix scientists will catalog thousands of genetic variations for any individ- creating a sort of "genetic bar code." ıg that information, "we will be able se drugs like lasers rather than shot- s," says Dr. Leon Rosenberg, a ceton University molecular biologist former research chief at Bristol- rs Squibb Co. "We will know whom eat, whom not to treat, and we won't t everyone the same way."

Within decades, the genetic bar code take on deeper meaning. Once sci- sts puzzle out more of the biological ıways leading to, say, cancer or ke, these bar codes will become tal balls. In our twisting strands of , it will be possible to spot what ases could appear in our future and chances of getting them. Of course, also raises explosive societal ques- s about who should have this infor- on—insurers, for instance—but at there will be the option of making tyle changes or using preventive tments to lessen the odds.

HEAVEN. Indeed, the world is ed for the biggest change in medi- since Hippocrates. People have al- s gone to doctors when they're sick. what if medicine could prevent ything from heart disease and can- o tuberculosis and AIDS from strik- n the first place? The need for ex- ive surgeries and drug treatments ld plummet. "Prevention leads to nly a longer, healthier life, but also h cheaper medicine," argues former geon General C. Everett Koop.

or is medicine the end of the ex- nent. Increasingly, the nation's am- waves of grain are laden with added s. As many as 70 million acres of e-spliced corn and soybeans are be- planted this year, vs. zero a few s ago. Richard L. McConnell, se- vice-president for research and de- pment at Pioneer Hi-Bred Interna- l Inc., figures that adding genes to corn withstand bad weather and s could double current yields. Ac- ing to Pioneer's economic models, advances mean the price of corn the next quarter-century will prob- be about what it is today—despite % increase in the world's population. oneer and others are also tinker- with genes that increase crops' nu- onal value. One gene Pioneer has d to corn increases the amount of phorus available to the pigs that t. Farmers don't have to add costly phorus supplements to the feed— and hogs' waste is less laden with nutrients that can wreak ecological havoc.

The new biology promises to change manufacturing, as well. Novo Nordisk, for instance, makes enzymes that reduce the need for environmentally harmful chlorine in papermaking. Another enzyme can replace several pounds of stones used to "stone wash" blue jeans. Fewer stones means less damage to the clothes, less wear on machines, and less pumice dust in the laundry. In tomorrow's world, "a significant and increasing chunk of the world economy will be dominated by the life sciences," predicts Harvard University-affiliated economist Juan Enriquez Cabot.

Visionaries predict the new biology will make people healthier and longer-lived. The debate is over whether the cost of health care to society will fall as people live longer. Skeptics say that many new drugs and procedures will be immensely expensive. "The economy simply cannot absorb all, or even more than 50%, of the things now in the pipeline," argues Dr. Alan L. Hillman, director of the Center for Health Policy at the Wharton School. "The new technology will be both a blessing and a curse," says USC's Schwartz. "Over the next 10 to 20 years, we will just see costs going up."

Indeed, a combination of rising life expectancies and demographics is raising the specter of a 21st century crisis. The health-care bill for Alzheimer's disease is already $100 billion per year. And as today's boomers reach the ages of greatest risk for the disease, the tab could soar, says Zaven Khachaturian, former head of Alzheimer's research at the National Institute on Aging. "A major public-health crisis may be coming."

Despite their warnings, Khachaturian and others are optimistic that this crisis can be avoided. There are indications that estrogen or anti-inflammatory drugs might delay the onset of Alzheimer's for a year or two. After finding genes that cause early Alzheimer's, researchers are beginning to understand the underlying biology—the crucial first step to discovering better ways to block the disease.

With such advances in the works, it's clear that biology is in the midst of an unprecedented wave of innovation. And the ultimate applications of today's research are as unpredictable as those of the past. Who would have guessed that Pentagon-funded research on communication networks in the 1960s would ultimately have spawned car shopping on the World Wide Web? Likewise, today's explorations of the genome will change the world in ways we can't imagine.

By John Carey in Washington

VOICES | Dr. Judah Folkman

TITLE Director, Surgical Research Laboratories, Children's Hospital of Boston. 65. **CONTRIBUTIONS** Folkman worked nearly 30 years to prove that blocking growth of tumor-nourishing blood vessels could fight cancer. Recently, he found natural inhibitors that wipe out tumors in mice—sparking a race for new treatments. **IN HIS WORDS** "As long as there is an unconquered disease, we have an obligation to pursue research... [For now], if you have cancer and you are a mouse, we can take good care of you."

THE BIOTECH HARVEST

Advances in genetics and other areas of biology are bringing an unprecedented wave of innovation. Here's a glimpse at what's already under development:

AGRICULTURE

- Salmon and trout engineered to grow twice as fast as normal
- Soybeans, cotton, corn, and other crops engineered to resist pests
- Corn gene-altered for higher nutritional value
- Cows, sheep, and goats that make drugs in their milk

MEDICINE

- Bacteria genetically engineered to lap up underground spills of toxic chemicals
- Genes that prod cancer cells to self-destruct
- Cancer "vaccines" that boost the immune system's ability to find and attack tumors
- Natural hormones that stimulate growth of new blood vessels, bypassing clogged ones
- Growth factors via gene therapy or cell implants that may prevent nerve degeneration from brain disease or injury

INDUSTRY

- Plants that produce biodegradable plastics
- Computers that harness the information storage capacity of DNA

DATA BUSINESS WEEK

THERMOND At startup Epigram, he aims "create a market that didn't exist before"

RISKS AND REWARDS

NO SLACKING IN SILICON VALLEY

How the crucible of the New Economy churns out one astounding product after another

Jeff Thermond could have happily stayed at 3Com Corp. for the rest of his career. After 8½ years helping build the computer networking company into a giant, he was a top manager with a fortune in stock options. But last summer, Thermond felt the Silicon Valley itch—and jumped ship to become chief executive of Epigram Inc. The Sunnyvale (Calif.) startup is about to unveil technology he hopes will become essential in every home—a way to link together PCs, consumer electronics, and appliances for the smart house. "We can create a market that didn't exist before," effuses Thermond. "We're going for a home run."

Take a look at an amazing phenomenon. After one of the most astounding outpourings of ideas and products in history, Silicon Valley's legendary innovation machine is still in overdrive. If anything, the Valley's stature as the world's high-tech capital is growing. Last year, 3,575 new businesses were launched, and venture capitalists poured a record $3.7 billion into startups—60% more than the year before, according to PriceWaterhouseCoopers. And 1998 is shaping up as another banner year: Venture capitalists dumped $1.87 billion into Valley companies in the first quarter, up slightly from the same period a year ago, say researcher VentureOne Corp. in San Francisco. "Silicon Valley is the single most important center for innovation," says Mitchell L. Moss, a professor at New York University. "Money follows ideas, and money flows to money."

MAGIC MIX. Signs are strong that the region will continue to churn out new ideas and new companies for some time. The reason? The Valley still possesses the combination of ingredients that nurtured Intel, Apple Computer, and Cisco Systems. The key is the sheer density of more than 7,000 tech companies crammed into a 50-mile corridor. That gives startups access to a deep talent pool of smart, experienced engineers, programmers, and managers, as well as the infrastructure—from legal to technical to marketing—that can transform an entrepreneur's idea into a company overnight. Add to that the unmatched availability of venture-capital and funding from larger corporations, and a climate that rewards risk-taking and tolerates failures, and you have the recipe for a technological hothouse.

True, Silicon Valley runs the risk

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tripping over its own success. Explosive growth has left the region with a shortage of engineers, a lack of affordable housing, and sky-high business costs that make it ever more expensive to start a company there.

Despite these problems, the Valley is moving into the 21st century at top speed. In the past, innovation focused on producing more powerful hardware and whizzy packaged software. Now, the hot investment fields are ones that aim to reshape entire industries: electronic commerce, digital consumer electronics, and communications. "The game now is structural changes in the economy itself," says John Seely Brown, director of the Xerox Palo Alto Research Center.

And Silicon Valley is playing the new game well. Take E-commerce, where the pace has accelerated to warp speed. Hundreds of startups such as E-Loan and Autoweb.com are devising ways to cut out middlemen and speed product cycles by connecting buyers and sellers directly over the Internet.

E-MAILROOM. Not all of these will succeed—but the sheer number of startups is an essential part of the Silicon Valley creative process. In E-commerce, where no one yet knows the best ways of doing things, the advantage of Silicon Valley is that it gives bright ideas a chance to prove themselves.

Nothing shows this better than Palo Alto's Kana Communications Inc., launched in 1996 by Mark Gainey, then 28 years old. Gainey had the idea of making software that categorizes and sorts E-mail. Potential buyers: companies that took the plunge into the Net but couldn't cope with the avalanche of customer E-mail generated by their new Web sites. Kana's software would enable companies to eliminate expensive brick-and-mortar call centers one day and, by having instant E-feedback from customers, quickly modify or customize products.

Gainey, who previously worked at venture-capital firm TA Associates, was able to raise more than $5 million to get started. Today, the startup has customers such as Netscape Communications, online auctioneer eBay, and cable company Cox Communications. "The global 2000 are waking up to the leverage they can get from electronic business," says Gainey. "And we're providing the plumbing."

But good ideas and cash alone are not enough to keep innovation going. Where Silicon Valley also shines is in the availability of talent that's seasoned and willing to take risks. At Epigram, for example, the five-person management team came to the startup with a total of 110 years of experience at such high-tech companies as 3Com, Sun, Rockwell, BBN Communications, and Cisco. Backers are betting that such hands will help the company get a big chunk of the home networking market, expected to reach $1 billion in sales by 2002, according to Forrester Research. Venture capitalists have funneled $13 million into the company, which will ship its technology early next year.

Startups such as Epigram have to find their way in a business dominated by giants. Indeed, one danger to Silicon Valley's innovative vigor is the growth of megacompanies such as Microsoft, Intel, and Cisco. In other industries, the emergence of such behemoths has typically signaled the maturing of the industry and the slowdown of innovation.

That has not turned out to be true in Silicon Valley—at least not yet. Instead the giants have been a further source of funds backing innovation. They have been pouring money into the Valley for several years, investing in or snapping up more than 200 companies. Intel alone has taken equity stakes in 125 fledgling companies, while Microsoft has poured money into more than 50 deals.

WIDER BETS. Association with the giants gives startups access to huge resources and marketing clout. For big companies, spreading R&D money beyond their walls is a way of stimulating innovation—and upping their chances of not missing the next thing. Intel, for example, has invested in companies doing everything from improving chip design and manufacturing to building Internet communities. "It's our equivalent of a Bell Labs," says Michelangelo Volpi, manager of Cisco's investment portfolio. "Instead of betting on one technology, we can place our bets on 10."

More and more, corporate investors are taking the next step and actually buying up startups with promising technology. "We don't invest in companies with the idea of selling," says Richard Kramlich, managing partner of venture capitalist New Enterprise Associates in Menlo Park, Calif. "But we've had 10 companies acquired this past year."

Motorola Inc., for example, recently paid an estimated $400 million for Starfish Software Inc. of Scotts Valley, Calif., which was started in 1994 by Philippe Kahn, founder of former software giant Borland International Inc. For Motorola, it was an opportunity to acquire Starfish's TrueSync technology which reconciles data between hand-held computers, PCs, and mobile phones. For Kahn, who together with his wife owned 75% of Starfish, it meant both vindication and riches. "It's almost embarrassing," says the 46-year-old Kahn. "It's more money than we'll need for the rest of our lives."

Often, such a purchase can give a new technology a jump-start. Take WebTV Networks Inc., a Mountain View (Calif.) company that was developing a digital set-top box for viewing the Web via TV. In August, 1997, Microsoft Corp.

VOICES Michael Moritz

TITLE Partner, Sequoia Capital. 43.
CONTRIBUTIONS The venture capitalist has scored big on electronic commerce, notably with Yahoo! Inc., the hot Internet search engine company. Sequoia's $2 million investment is now worth $1.3 billion. His latest play: online retailer eToys Inc.
IN HIS WORDS "If anybody's between you and your customers you had better be shaking in your boots. Figure out how to profit from the Net, or it will drain the juice out of your marrow."

THE VALLEY IS STILL HOT...

- Venture capitalists poured a record $3.7 billion into Silicon Valley startups in 1997—up 60% from 1996.
- More than 53,000 jobs were created in 1997. Wages grew at nearly twice the national average.
- 34 companies went public, raising $1.1 billion and earning a market valuation of $7.4 billion.

...BUT THERE ARE SOME WARNING FLAGS

- While some startups still aim to create new industries, many others are digging for smaller niches in the "Wintel" mainstream.
- Only 15 Valley companies issued IPOs in the first half of 1998. That's against 34 for all of 1997—and 74 in all of 1996.
- Success has a price. Freeway delays have doubled since 1994, and housing costs are the nation's highest.

DATA: PRICEWATERHOUSECOOPERS, CALIFORNIA EMPLOYMENT DEVELOPMENT DEPT., VENTUREONE CORP., BROADVIEW, BUSINESS WEEK

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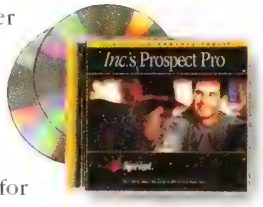

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STAFF MEETING A gizmo from TiVo will recommend TV programs to suit the viewer

bought the company for $425 million and quickly brought in research and development funds—in addition to Microsoft's considerable marketing might. Sales of the WebTV box jumped from 50,000 at the time of purchase to 400,000 today. "They got a great exit and a better shot at realizing their dream under Microsoft's umbrella," says Andy Duncan, CEO of E-commerce startup EC Co.

But it's not just the big outfits that are funding new firms: The Valley's abundance of wealthy entrepreneurs continues to be an essential ingredient to the innovation cycle. Even after an entrepreneur is flush with cash, few stray far before returning to the high-tech hunt—to start another company or invest in other hopefuls. "They get the new house, the new wife, the boat, and they don't really like to play golf. So what then?" asks Hans C. Severens, a former investment banker who now backs tech startups. "They have business in their blood. They have money in their pockets. It's about reinvesting."

BAND OF ANGELS. That part of the equation could become more critical in the years ahead. The sheer abundance of startup capital is beginning to have one ironic consequence: Venture funds are bulging to the point where many investors no longer want to be bothered with small-fry opportunities. The average size of deals has climbed 27%, to $5.3 million, in the past two years, according to PriceWaterhouseCoopers.

In typical fashion, the Valley is plugging the hole. To seed deals too small for venture capitalists, private investors are jumping into the fray, including one group of 120 industry execs led by Severens, known as the Band of Angels. Since it was formed in January, 1995, the Band has helped launch 62 startups, pouring an average of $1.1 million a month into the market. This reinvestment is helping the Valley refuel itself—and is apt to continue doing that as even more wealth is spun off. One enterprise that benefited from such funding was EC Co. Duncan started with some of his own money, then brought in a half-dozen angels. Funding from four corporations, including Intel, followed. Only then did venture capitalists add their contributions.

Traffic delays on Silicon Valley freeways have doubled since 1994. And the housing costs are the highest in the country

Could anything slow the rate of innovation in Silicon Valley? As dynamic as it is, the Valley isn't immune to larger economic forces. The Asian economic crisis is making a dent: Layoffs have already occurred at Intel, Sun Microsystems, and Applied Materials. Last year also saw a sharp drop in the number of initial public offerings for local companies: There were just 34 IPOs, vs. a record 74 in 1996, according to VentureOne. Just 15 went public in the first half 1998. Part of the slowdown r flects a return to more tempere conditions after the Interne stock frenzy of 1996.

Another drag is the Valley physical limits. It's bursting the seams: Commercial real e tate vacancies hit a 10-year lo in 1997, and traffic delays the region's clogged freeway have doubled since 1994. Th cost of housing, too, is the hig est in the country, making harder to recruit top talen That's prompting some comp nies to expand elsewhere in Ca ifornia or into other states.

RESILIENCE. But the nerve ce ter of the tech world is st firmly planted in the Valle Even when companies set u shop elsewhere, says Bec Morgan, chief executive of t public/private partnership Joi Venture: Silicon Valley Network, "r search and development incubators w still be here." SAP, L. M. Ericsson, a AT&T, for example, have all establish R&D centers in the Valley in rece years. Even Microsoft, long rooted Seattle, plans to build a 32-acre ca pus in Mountain View.

It's that constant supply of fresh t ent that will continue to keep Silic Valley on the cutting edge. Despite p riodic downturns, the region has sho a remarkable ability to catch the late technical wave. Is it home networki automating customer service, or co necting buyers and sellers over the Ne Or maybe it's as simple transforming the lowly TV in a tech-savvy device. Tha what 48-year-old Mike Rams a former marketer at Silic Graphics Inc., thinks. In Su nyvale, he launched TiVo I to create a smart set-top b that recommends shows viewers based on their pref ences and records programs later viewing as easily as cli ing a remote. "We're deali with a whole new category," Rams says. "We're on the edge."

It's the Valley's siren song. Eve day, seasoned managers and fres scrubbed MBAs alike throw caution the wind and try their luck at buildi the next Yahoo! Inc. or Sun Micros tems Inc. As long as they do, the la of startup dreams, breakthrough te nologies, and fast fortunes will keep innovative verve.

By Andy Reinha in San Mateo, Ca

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EDUCATION

AN OLD UNIVERSITY HITS THE HIGH-TECH ROAD

Chicago's quest for relevance in the Information Age is forcing it to reexamine its traditional mission

In 1892, industrialist John D. Rockefeller underwrote the construction of a Gothic outpost in the Midwest to pursue higher knowledge in the manner of leading European universities. The University of Chicago soon justified its benefactor's vision, becoming an intellectual cauldron producing pioneering research in sociology, education, free-market economics, and nuclear physics.

But the Information Age has mostly passed Chicago by. The Massachusetts Institute of Technology and Stanford University—the turbines behind Route 128 and Silicon Valley—have become the nation's preeminent technology-research universities. Knee-deep in patents, both enjoy hundreds of contracts with companies to develop commercial products. Chicago, by contrast, never has had an engineering school, and it only recently reinvigorated a purely theoretical computer science department. More telling, it has seen its rank in science funding slip from among the top 10 universities nationally to about 20th over two decades.

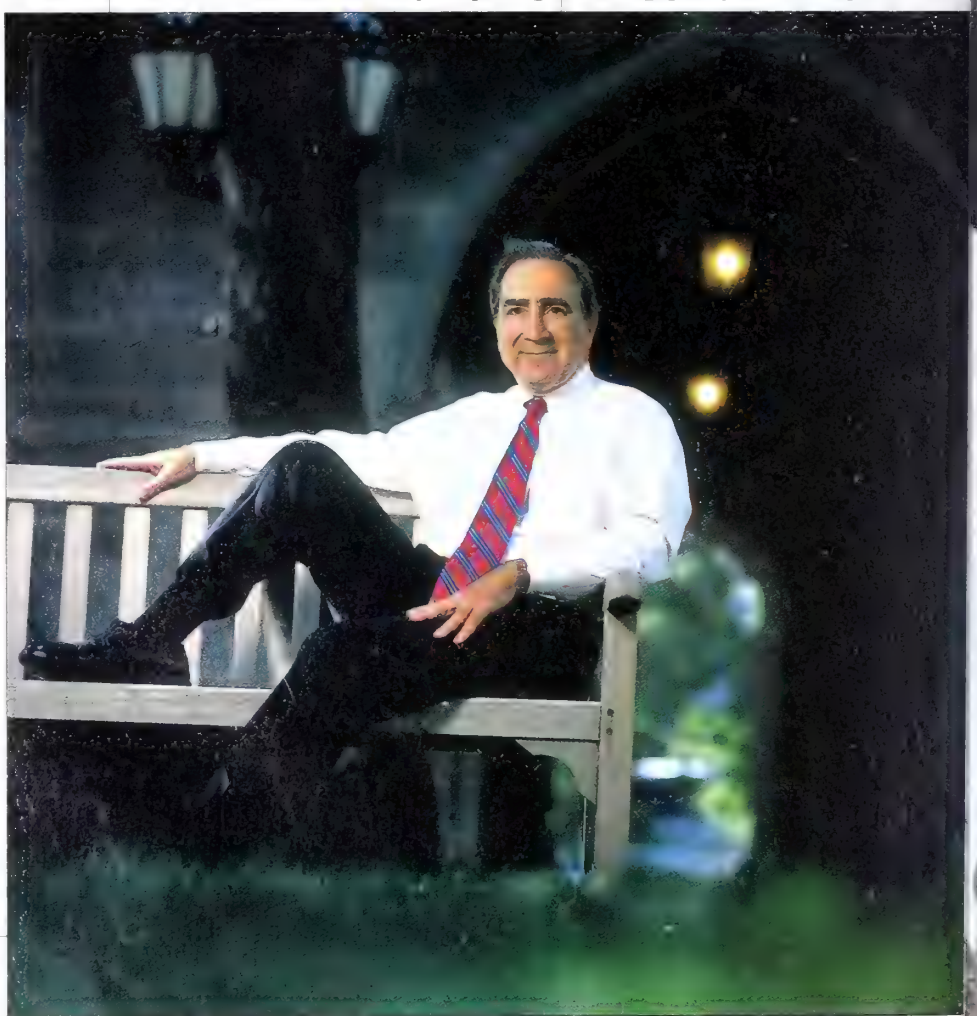
HIRING STARS. So Rockefeller's institution is evolving, hoping to participate in the economy of the new century. Building on its research muscle in life sciences, the university is trying to capitalize on sweeping medical and biotechnology developments. It's hiring established stars from rival universities and industry labs and seeking out opportunities to commercialize its discoveries. An in-house venture-capital operation called ARCH Development Corp., set up to back professors' entrepreneurial efforts, has lined up its highest number of startups and technology-transfer deals.

It is a quest for relevance—a search that drives dozens of major research universities across the nation. These schools, most of them enormous operations with billion-dollar budgets, are reexamining their traditional missions, attempting to adapt to an era of rapid technological change and globalization. They're trying to keep up as federal research budgets are barely keeping pace with inflation and industry is pulling back on investments in pure research.

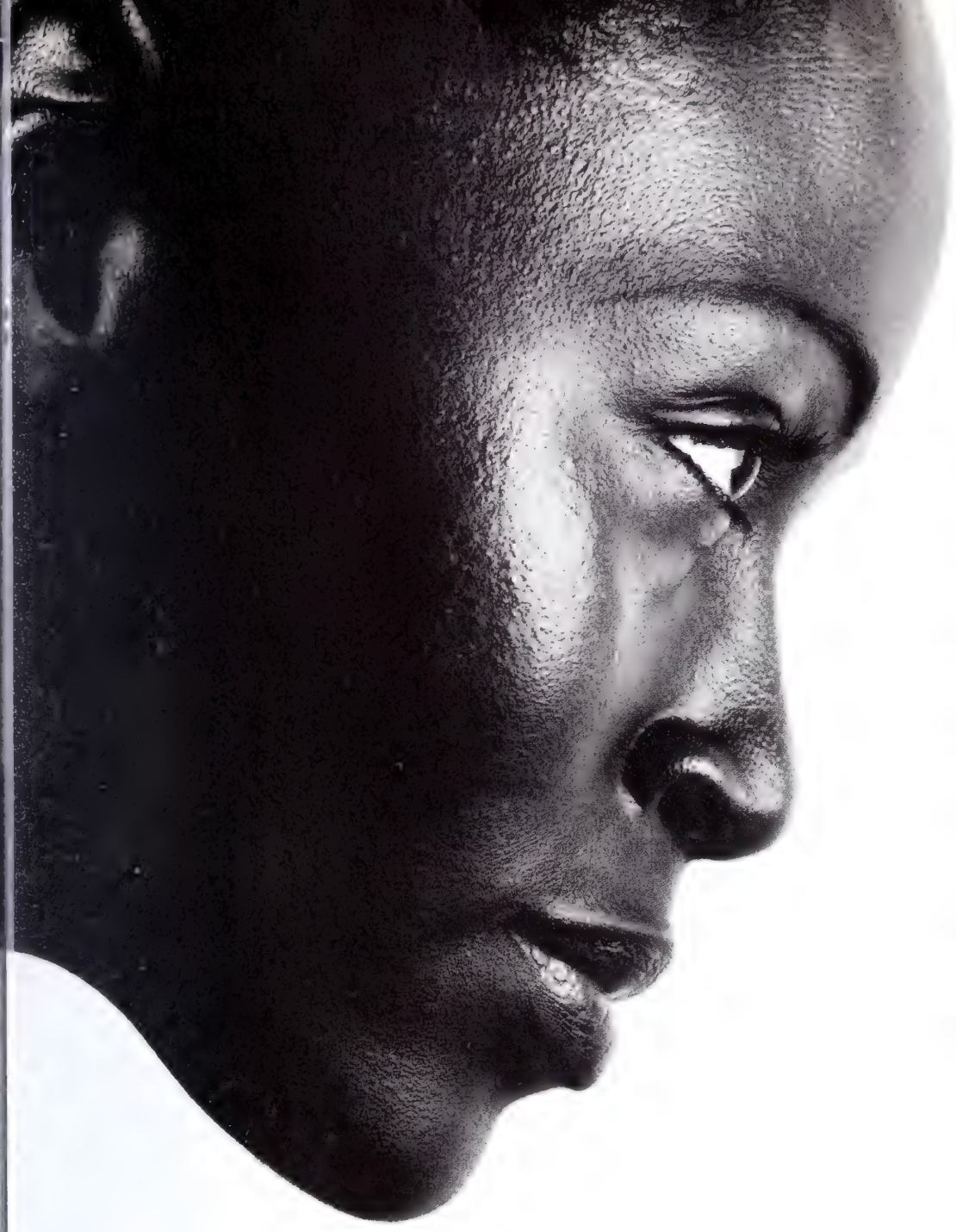
The 21st Century Economy will d
pend on the continued vitality of
broad network of such institutions-
sources not only of critical thinkers b
also of their ideas. Research universiti
have helped drive innovation for d
cades, spurring development of ever
thing from jet engines to the Interne
Indeed, more than half of industr
patents issued in 1993 and 1994 credite
some basic university research, accor
ing to consultancy CHI Research Inc.

The good news: Dozens of universiti
have the resources to act as resear
machines. A generation ago, there we
perhaps 10, estimates Richard Florid
director of the Center for Economic D
velopment at Carnegie Mellon Unive
sity. To succeed, though, these schoo
must identify areas of research, fost
collaboration, and invest to turn wis
ideas into full-fledged innovations. Th
must also work with funders and poli
cians to extend the "campus" to bu
mini-Silicon Valleys, Florida argues.

It's a delicate balance. Chicago Pre
dent Hugo F. Sonnenschein talks of pr
serving purity—"the emphasis on t



SONNENSCHEIN Balancing academic purity and innovation



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RECRUITS Thompson, Giger, and Steele are helping rebuild the school

question"—but says "producing extraordinary education is extraordinarily expensive, and we can't afford to sit idly by." Observes Robert Zemsky, director of the Institute for Research on Higher Education at the University of Pennsylvania: "Chicago always has been the most classic of universities. They will be tested in the New Economy to remain true to their mission and market-smart."

BOUTIQUE STATUS. Chicago's nascent transformation is made necessary, in large part, by a squeeze in federal research funding. Government grants, which in 1997 accounted for 60% of the $24 billion in academic research, have been rising at just 2.3% a year for the past five years, half the rate of the 1980s. And Chicago faces growing competition for both public and private funds from such big schools as the Universities of Illinois and California. Unless it changes, the university faces the prospect of becoming "a boutique, with narrow specialties, limited funding and limited impact," admits David W. Oxtoby, dean of physical sciences.

Chicago is moving quickly to license its technology. Stanford and MIT, aggressive pioneers of such arrangements, are way ahead of the pack, with 259 and 257 active licenses and options on technology, respectively. Chicago has just 36 such deals, but it's catching up: In 1996, by virtue of a few big payouts, it ranked sixth in royalty income, up from 29th the year before and ahead of MIT.

To regain its influence of old, Chicago hopes to reap commercial fruit from its reinvigorated combined division of biological sciences and Pritzker School of Medicine. Three years ago, Sonnenschein recruited Glenn D. Steele Jr., then a cancer-surgery professor at Harvard Medical School, to head the operation. Since then, Steele has replaced 50% of his department heads, many with outside hires—"insinuating the place," he says, "with entrepreneurial people" responsible both for raising funds and for turning out actual products.

Steele wants Chicago back among the top ten science schools within five years. He talks of a new ethic, one that requires measuring progress in commercialization and boosting collaboration with the drug and biotech industries. "I've told the faculty they have an additional responsibility to go beyond the discovery of new knowledge," he says. "No longer is the job description to sit in your laboratory and think, and expect me to provide all the resources."

The arrival of Anthony A. Kossiakoff, who started on July 1 as chair of the biochemistry and molecular biology department, reflects the new emphasis on entrepreneurialism. Kossiakoff, an expert in protein structure and design, brings 15 years of experience as a scientist and executive at Genentech Inc. Now co-chair of a new institute that will bring together basic and clinical researchers in physics, chemistry, computer science, and biology, his outsider's perspective has a refreshing ring: "There is a lot to be gained from interaction with industry, and students are looking for a different kind of high that entrepreneurialism can provide."

Steele's other new catches will join other recent hires such as Craig E Thompson, an immunologist who arrive at Chicago from the University of Michi gan five years ago. Thompson recog nized that funding pressures from th feds and third-party health insurer would force researchers to become mor entrepreneurial. His research has le to two startups, both backed by ARCH

"WE DO SCIENCE." Will such bets pa off? Chicago's reinvention, and that universities like it, amounts to a marke test: Innovation will be rewarded wit commercial revenue. That mercenar formula, to be sure, fuels misgiving Maryellen L. Giger, a 20-year Chicag veteran with a dozen patents in com puter imaging to her credit, fears th rush to commercialize will deflect sc entists from their true mission: "Wha we do is science, what they do is bus ness. The motivations are different."

Hers is a concern that resonate throughout higher education. "We ar more and more geared to the reality modern industry," says MIT Presider Charles M. Vest. "But as that pulls i one direction, we are pulled in anothe by the quest for fundamental researc which is long-term and uncertain bu can result in true innovation." Perhap universities can find a productive ba ance. At its best, innovation should spu a virtuous circle—generating revenu that can be applied to more basic r search. That could produce the breal throughs that drive economic growth.

By Richard Melcher in Chica

RETHINKING THE UNIVERSIT

What research institutions must do t keep pace with the New Economy

ELIMINATE BOUNDARIES Universities must encourage teamwork across age-old disciplines, bringing together educators and students in computer science, engineering, biology, medicine, and business

COURT INDUSTRY Higher education has to aggressively seek technology-transfer and licensing deals, while canvassing companies worldwide for research funding that will spur new discoveries.

COMMIT TO SCIENCE Basic scientific research is the backbone of innovation. Universities must seek partnerships whil still fiercely resisting restrictions on research grants.

SEED ENTREPRENEURSHIP Institutions can create local business hot spots by developing ties with area development officials, business executives, and venture capitalists.

VOICES **Louis Gerstner**

TITLE Chief Executive, IBM. 56. **CONTRIBUTIONS** Under Gerstner, IBM set up Reinventing Education, a $35 million fund that contributes money and technical expertise to lift school quality around the world. **IN HIS WORDS** "There is a direct link between education and income. People who have a better education have better jobs and get better pay. Countries that have better education systems have stronger economies and are tougher competitors in the worldwide marketplace."

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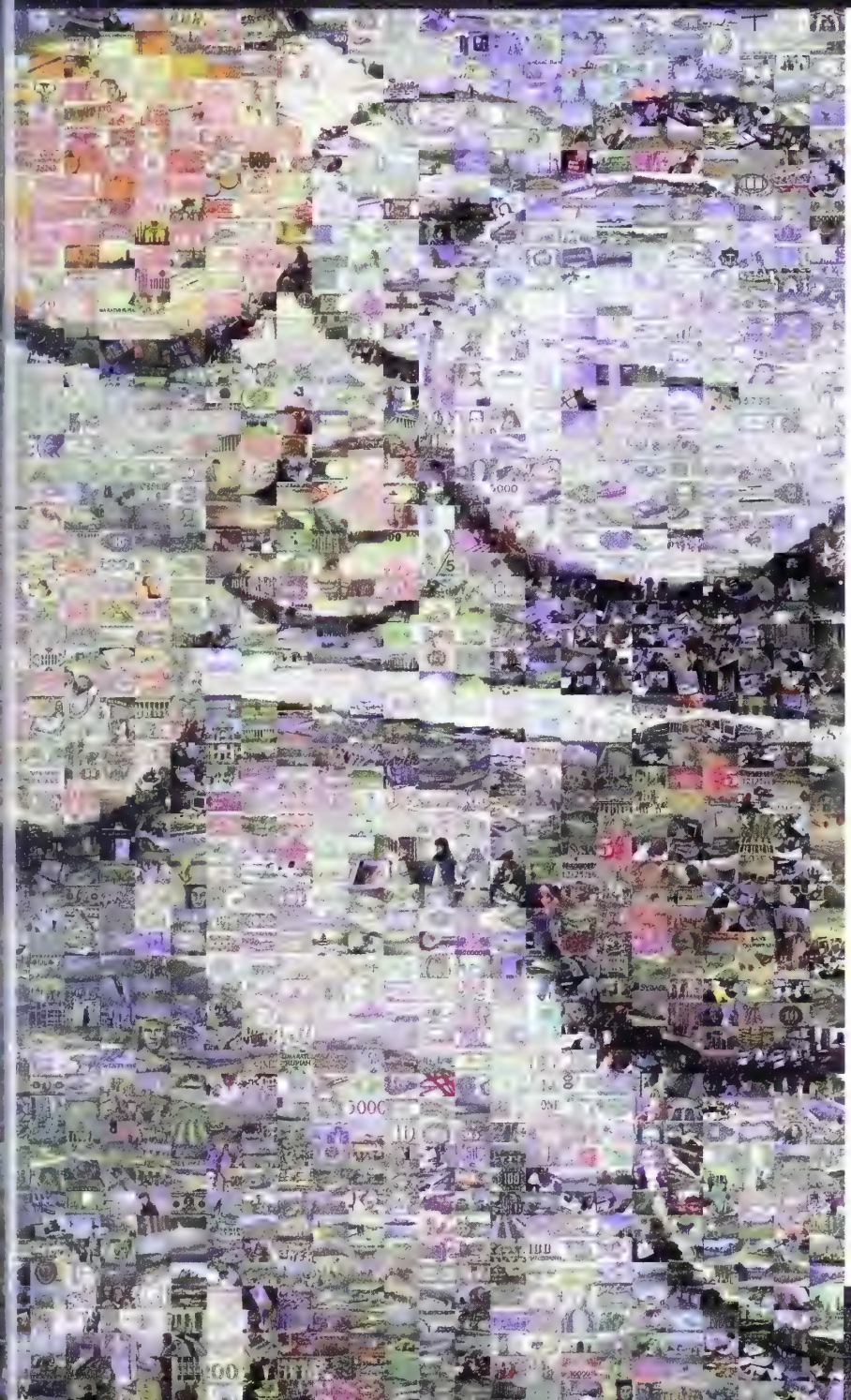

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FINANCE

DOING BUSINESS

Revolutions in finance, management, manufacturing, and selling are changing the rules of engagement

Financial engineers don't wear white lab coats. They don't experiment on rats or perform gas chromatography. Their raw material—money—isn't as jazzy as what biologists and physicists investigate. But the innovations they produce will contribute just as much to economic growth.

Maybe more, in fact. Because without the science of finance, all other sciences are just a bunch of neat concepts. Ideas begin to contribute to human betterment when they're financed—by venture capital, stock offerings, loans, or buyouts. A smoothly operating financial system showers money on good ideas. Equally important, it cuts off funding to tired ideas and tired companies, so their assets can be deployed more efficiently elsewhere. (The lack of such a process in Japan helps explain why that nation remains part of the old economy.)

The finance revolution in the past 25 years rivals the one that gave us the microchip. Look at the changes: Mortgage loans are cheaper because financiers have found a way to repackage them so they can be resold. Profits are more predictable because companies hedge risks. Employee stock options align workers' interests with shareholders'. Initial public offerings are fast and easy. And people have more investment choices than there are flavors of ice cream.

This is only the start. The new finance will master money in the same way computers master data and biotechnology has begun to master DNA. With their new theoretical tools, financial engineers can break down any raw investment into its components, then synthesize from them something more salable: not just mortgage-backed securities but also strips, swaps, swaptions—the list goes on.

COMMODITIZED. The entire economy benefits when financial rocket scientists create products that simultaneously meet the needs of those who supply capital and those who use it. Sums up finance pioneer Myron S. Scholes, co-winner of the 1997 Nobel prize in economics: "When you make the markets more efficient, the cost of capital falls. The cost of capital falling results in enhanced output, and consumers as a whole are better off."

In the 21st century economy, innovation in finance will increase in concert with the increase in competition. Partly because of deregulation and globalization, competition should get tougher, and margins thinner. As products such as home mortgage loans become commoditized, financial-service companies will be forced to get more creative. Soon, says Hen Birdseye Weil, a senior lecturer at Massachusetts Institute Technology's Sloan School of Management, "financial servic will be almost indistinguishable from any other software bu ness, with continual innovation and preemptive cannibalizatio

Financial technology will keep feeding off information tec nology. Weil says the secret to success will be a strong so ware platform, which will lower the cost of generic servic while making it possible to create high-margin variations well. Says Weil: "A few companies that get it right can sp away from the rest and become stronger and stronger."

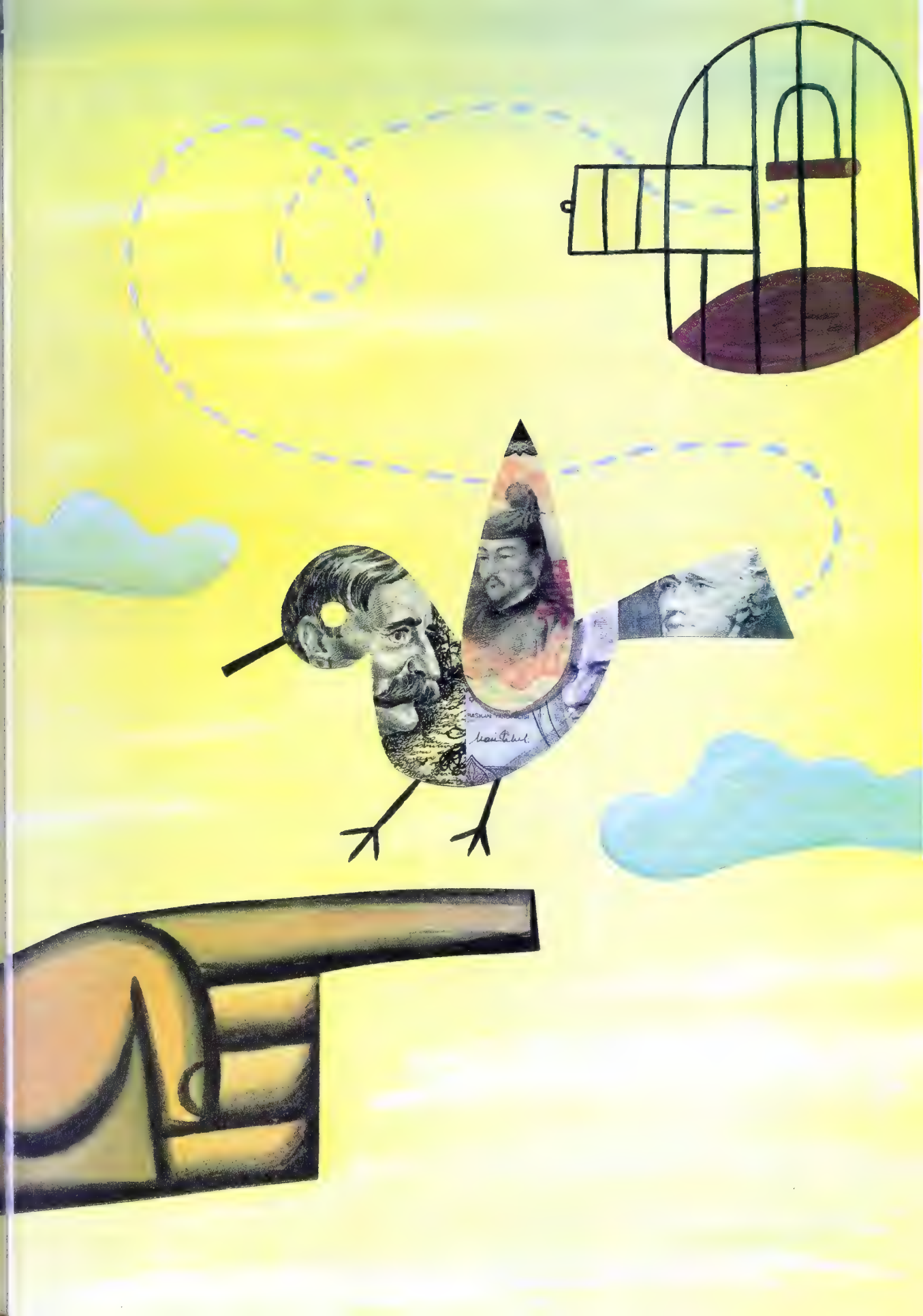
In the new world of finance, size counts. Big compani enjoy economies of scale and name recognition, and they can safer because their bets are spread across more regions a market segments. The value of U.S. bank mergers in t first half of 1998 w greater than that the three previo years combined. T mergers are occurri across industries well. The propos $70 billion combi tion of Travele Group Inc. and Ci corp into Citigro would bring und one roof commerci personal, and inve ment banking, as w as stockbroking a insurance.

Pressures to co solidate will intens as the big get bigg In eight years, fin cial services will dominated by 5 10 global compani each with a full ar of services, predi Steven M. Gluckste of Capital Z Partne a newly formed N York firm that will vest in financial co panies. In additi predicts Gluckste there will be five six big compan that will be prima advisers and brokers, such as Chicago's Aon Corp., one the world's biggest insurance brokers.

At the other extreme will be specialists that survive by ing one thing either very cheaply or exceptionally w Gluckstern, who is also nonexecutive chairman of Zur Reinsurance Inc., predicts that companies caught in betwe the extremes will wither: "It will start to look like a barbe

By offering lower prices or better service, specialists w discipline the financial supermarkets; the big guys know th customers can walk away if they get a raw deal. "There is way we are going to maximize a short-term transactional b efit at the risk of destroying a long-term relationship," s Chase Manhattan Corp. Vice-Chairman Joseph G. Sponho

Predictably, the biggest winners from financial innovat will be companies, and families, that have complex financ Banks already show signs of losing interest in people v



SHARED RISK When storms come, insurers can reduce their exposure through index call options

want just plain-vanilla checking accounts. Citibank, for instance, now charges $9.50 a month for checking, plus 50¢ per check written. Fees are waived only for people who have a minimum balance of $6,000 in their combined accounts.

But as incomes and wealth rise, more people will find themselves thrust into the role of asset managers. Businesses, too, will have to become more sophisticated—if only to keep pace with financially innovative rivals.

That's where science comes in. Financial engineers view every investment opportunity as a bundle of separable risks and rewards. Their skill lies in teasing the bundles apart and parceling out components to the investors who will pay the most. A simple example is stripping apart the payment stream from a loan portfolio. Some investors will opt to receive the principal-only portion, while others go for interest-only. The buyers happily pay a tad more to get what they want, which translates into a better deal for the borrowers.

Far from Wall Street, in Minnetonka, Minn., financial engineers at Cargill Inc. are transforming the markets for stuff like eggs and sugar. The $51 billion commodities trader and processor is willing, for instance, to guarantee the price of heat-and-serve airline omelettes to its customers for up to a year. It erases most of its own exposure to a spike in egg prices by artfully combining various financial instruments. (Exactly how, it won't disclose.) Using other risk-reductio techniques, Cargill can lock in a sugar price for sugar pr ducers for up to five years—vs. less than two years in the f tures market. "The products that we're preaching about toda are going to get much more widely and robustly used fiv years from now," says David E. Dines, vice-president fo commodity risk management products.

HURRICANE COMING. Another promising innovation is "liv cat," short for live catastrophe coverage. As a hurricane a proaches shore, property-casualty insurers can reduce the risk exposure by buying catastrophe-index call options o the Chicago Board of Trade. Option prices change from m ment to moment, right along with the wind-speed gauges. the storm is bad, profits from the options help cover claim payments.

Or look farther ahead, to a problem that periodicall keeps homeowners up at night: the possibility of plungin property values in their neighborhoods. If you need to sell the bottom, you could suffer a huge loss. Within five year though, you may be able to buy a put option—a bet th prices will fall. If they do, the profit you make on the optio will compensate for the loss in value of your house. If pric rise, on the other hand, the put option will expire worthles But you won't care, assuming that your house's price a preciates in line with its neighbor (True, it might not, but few hedges a perfect.)

Yale University economist Robert Shiller is trying to enable real esta options trading by creating price i dexes for housing. Says Shiller: "Som times the reaction we get is, 'Why do people already do this?'"

While the exotic part of the new nance is customization, the biggest i

VOICES Jill Considine

TITLE President of New York Clearing House Assn. 53. **CONTRIBUTIONS** Considine bolstered the ability of the nation's crucial bank payments system to weather a financial crisis. The electronic network that transmits $1.4 trillion per day in payments between banks now can survive simultaneous defaults by its two largest banks. **IN HER WORDS** "We're now at the point where we're able to handle risk much better. You couldn't have done that unless you had superior technology."

provements may come from cost-cutting. That's surely the case so far:

Annual productivity gains for commercial banks averaged just 0.6% for most of the 1970s, then rose to 2.0% in the 1980s and hit 3.5% in the 1990s, according to the Bureau of Labor Statistics (chart). For instance, in 1977 a secure telex from a bank in New York to one in Hong Kong cost $15. Now, it's about 30¢. "We're reaping the gains of the technology that everyone was talking about in the early '70s," says Jill M. Considine, president of the New York Clearing House Assn., which coordinates bank payments.

Firms that sell services aren't the only ones getting streamlined. So are the finance departments of corporations. Hackett Group of Hudson, Ohio, calculates that the financial function accounted for just 1.4% of overall corporate expenditures in 1997, down one-third from 2.2% in 1988. World Research Advisory Inc. of Reston, Va., which advises chief financial officers, predicts that within five years, many corporations will outsource not only tax and audit duties but also planning, budgeting, evaluation—even competitor analysis and M&A.

Some of the biggest savings in the coming decade are likely to come from a reduction in ·rica's wasteful reliance on paper checks. Checks, which ·rucked and flown from bank to bank, cost two to three s as much to process as electronic payments, such as credit cards. Florida State University finance professor id B. Humphrey predicts that the proportion of elec- ic payments in the U.S. will grow from 24% in 1995 to in 2010. That could really help the economy. Says John Iohr, executive vice-president of the New York Clearing se: "Something like half a percent to 1% of GDP is used

VOICES | David Komansky

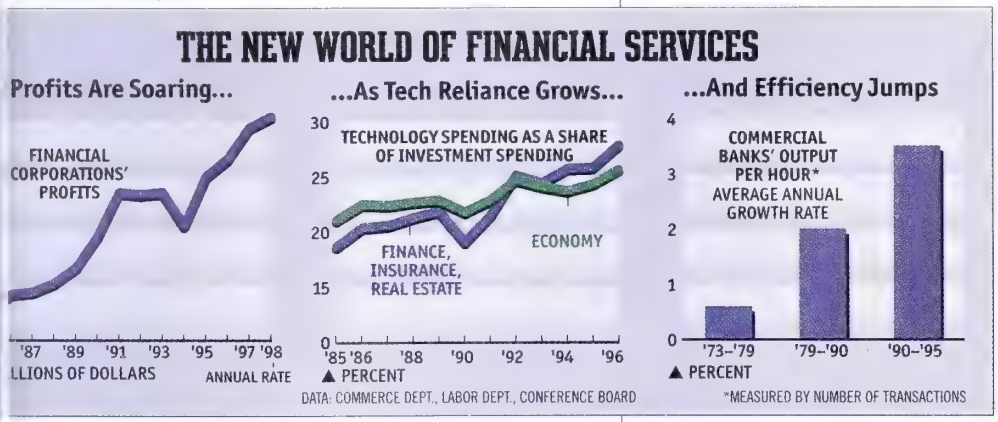
TITLE Chairman and CEO, Merrill Lynch & Co. 59.
CONTRIBUTIONS He has led Merrill on a worldwide acquisition spree, with major purchases in Japan, Britain, and Canada. His intent: to make Merrill the first global retail and institutional securities firm. **IN HIS WORDS** "Computers and digital networks will continue to transform the financial-services industry and change how we work and relate to one another. But they will not replace the value of human relationships."

They're like John Henry, who died trying to outdo a steam drill. With gigabit computer networks crisscrossing the oceans, it is possible to bring together all the world's interest in a particular stock, bond, currency, or derivative at a single point in cyberspace. There, a supercomputer can match buyers and sellers at light speed and infinitesimally narrow spreads.

FOR A SONG. The writing is on the wall: Seat prices have fallen 50% from their highs on the Chicago Board of Trade and a colossal two-thirds at the Chicago Mercantile Exchange. Even the New York Stock Exchange has seen a one-third decline in seat prices from a record $2 million earlier this year.

Of course, some sectors are doing just fine. Profits of Merrill Lynch & Co., for instance, have more than quadrupled since 1988. And commercial banks, which were on their knees during the recession in 1991, are having one of their best decades ever (chart). The Federal Reserve reported recently that banks' net interest margin between lending rates and borrowing costs has actually been widening, from about 3.5% in the mid-1970s to about 4.3% in recent years.

But even for them, competition is mounting. The threat is not "disintermediation"—there will always be a need for someone to represent investors' interests, making sure borrowers and stock issuers make good use of the money they're entrusted with. The question is whether the intermediary's role will be played by today's bankers and insurers or someone else. New intermediaries include rating agencies such as Standard & Poor's Corp., a unit of BUSINESS WEEK publisher The McGraw-Hill Companies Inc., which enable rated borrowers to go straight to the capital markets instead of appealing to loan officers.



The only true disintermediation is when the owners and the managers are the same people—that is, in a privately held company. Scholes argues that financial technology will make it easier for companies to become private or remain so. They will insure themselves through hedging in the futures and options markets. And by reducing their risks, they will need less of a safety cushion of equity. Scholes cites Cargill as a company that has managed to remain private through hedging. Said Scholes in his Nobel lecture: "I believe the corporate form we know today will not be long-lived."

It has been quite a while since the days of green eyeshades and No. 2 pencils. Says Jerry F. Gollnick, president of Tulsa's Williams Energy Services Co.: "I used to say this business wasn't rocket science. But then we hired somebody from the Jet Propulsion Laboratory." Innovation is everywhere.

By Peter Coy in New York

·pport the operation of the payment system. With few- ·ecks, that could be cut in half."

·e Internet will be another force for change. Piper Jaffray a Minneapolis brokerage, figures the average commission trade at the top 10 online trading firms has sunk like a e, from $52.89 in early 1996 to $15.77 in early 1998. Fur- drops are in store. As costs fall, so do prices: The un- ·riting spreads on common stock issues dropped to 6.08% year from 6.47% in 1990, according to Securities Data Co. mong the biggest losers will be floor traders and specialists.

THIS PHOTOGRAPH BY HUNTER GIFFORD/GAMMA-LIAISON. CHART BY ERIC HOFFMANN, BW

MANAGEMENT

THE CORPORATION OF THE FUTURE

Cisco is a good model. It reads the market well, responds quickly. And it knows how to harness high tech

The once unthinkable decline o many of the world's largest cor porations has become all too common in recent years. Strate gic blunders and oversights by manage ment have pulled down such powerfu and mighty giants as AT&T, Eastma Kodak, and General Motors.

Yet there is a less visible but eve more critical danger: the inability t adapt to the speed and turbulence o technological change. After massiv high-tech investments, management only beginning to make the organiza tional changes needed to transform in formation technology into the poten competitive weapon that it will need t be in the 21st century.

Few companies have grasped the far reaching importance of the new tech nology for management better than Ci co Systems Inc. The San Jose (Calif company has become the global leade in networking for the Internet, with an nual revenues of more than $8 billion It's also a Wall Street darling, with market cap approaching $100 billion.

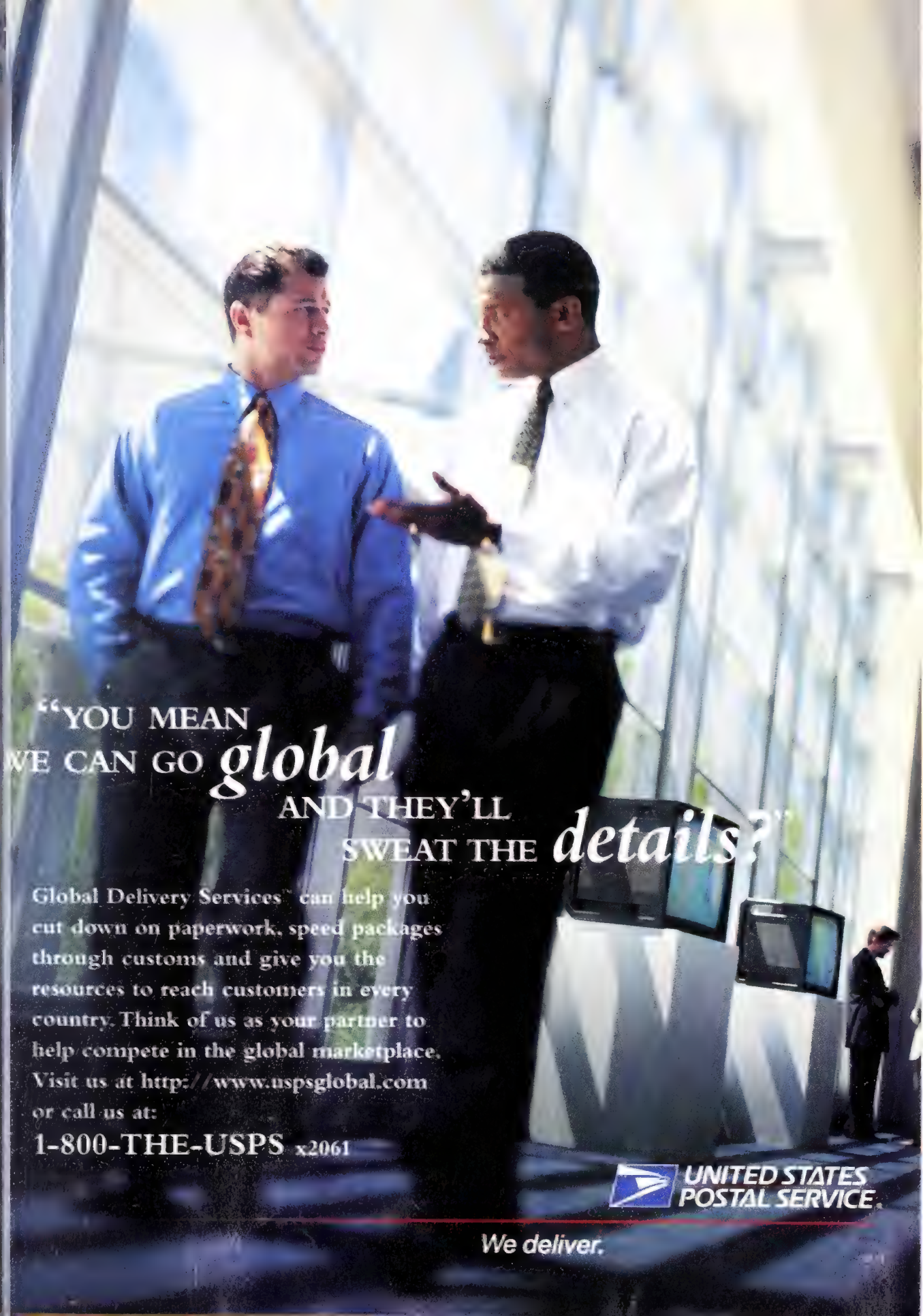
Cisco could well provide one of th best road maps to a new model of ma agement. Partly because it makes th tools to build the powerful network that link businesses to their custome and suppliers, Cisco itself has been the forefront of using technology t transform management practices.

NEAR-RELIGIOUS. But it's not only th company's innovative use of technolog that wins favorable reviews. It's al the company's mind-set and culture, i willingness to team up with outsiders acquire and retain intellectual asset its near-religious focus on the custome and its progressive human resource po cies. "Cisco is the quintessential ou side-in company" says James F. Moor chairman of consultants GeoPartne Research Inc. "They have mastered ho to source talent, products, and mome tum from outside their own walls. Tha a powerful advantage."

This corporate adolescent—found in 1984 by a group of computer scie tists from Stanford University—is hea ed by a leader, John T. Chambers, w cut his teeth at successful compani that stumbled. At both IBM and Wa Laboratories Inc., the soft-spoken We Virginian got a firsthand glimpse of he arrogance and reluctance to chan caused severe pain and dislocation.

Those experiences, including a tra matic time when he survived five layo in 15 months at Wang—before resigni

CHAMBERS "Laying off people was the toughest thing I ever did. I'll move heav and earth to avoid doing that again"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in 1990—colored his view of what a healthy organization should be. "It taught me how a company should be built in the first place and how to do things dramatically different the next time," says Chambers, 48, who joined Cisco in 1991 and became CEO in 1995. "Laying off people was the toughest thing I ever did. I'll move heaven and earth to avoid doing that again."

To hear Chambers tell it, his people and his organization are "in the sweet spot"—where technology and the future meet to transform not only business but all of life. His vision is simple: "We can change the way people live and work, play and learn." It is an idealistic phrase that falls out of his mouth repeatedly and unabashedly. It is also an inspiring and motivating declaration for each of Cisco's 13,000-plus employees.

Chambers aims to be the Jack Welch of the new millennium. Like General Electric Co.'s Chairman Welch, he has decided he wants to be No. 1 or No. 2 in every market, a condition that already exists in 14 of the 15 markets in which Cisco competes. Beyond that strategic goal, Chambers believes that the new rules of competition demand organizations built on change, not stability; organized around networks, not a rigid hierarchy; based on interdependencies of partners, not self-sufficiency; and constructed on technological advantage, not old-fashioned bricks and mortar.

The network structure has vast implications for managing in the next century. GM's Saturn Div. and Dell Computer Corp. have shown how the network can eliminate inventory, by connecting with partners that deliver goods only when they are needed. In the new model that Chambers is creating at Cisco, however, the network is pervasive, central to nearly everything.

It seamlessly links Cisco to its customers, prospects, business partners, suppliers, and employees. This year, Cisco will sell more than $5 billion worth of goods—more than half its total—over the Internet, nearly three times the Internet sales booked by pioneer Dell. So successful has Cisco been in selling complex, expensive equipment over the Net that last year Cisco alone accounted for one-third of all electronic commerce.

LIVING ON THE NET THIS YEAR, CISCO WILL SELL **$5 BILLION** IN GOODS OVER THE INTERNET. AND **7** OUT OF **10** REQUESTS FOR TECH HELP WILL BE FILLED ELECTRONICALLY—AT SATISFACTION RATES ECLIPSING THOSE INVOLVING HUMAN INTERACTION.

MR. NICE GUY Chambers, here at a Cisco picnic, stresses human values

Seven out of 10 customer requests for technical support are filled electronically—at satisfaction rates that eclipse those involving human interaction. Using the network for tech support allows Cisco to save more money than its nearest competitor spends on research and development. "It has saved me 1,000 engineers," gushes Chambers. "I take those 1,000 engineers, and instead of putting them into support, I put them into building new products. That gives you a gigantic competitive advantage."

The network also is the glue for the internal workings of the company. It swiftly connects Cisco with its web of partners, making the constellation of suppliers, contract manufacturers and assemblers look like one company—Cisco—to the outside world. Via the company's intranet, outside contractors directly monitor orders from Cisco customers and ship the assembled hardware to buyers later in the day—often without Cisco even touching the box. By outsourcing production of 70% of its products, Cisco has quadrupled output without building new plants and has cut the time it takes to get a new product to market by two-thirds, to just six months.

"PERSONAL TOUCH." The network also is Cisco's primary tool for recruiting talent, with half of all applications for jobs coming over the Net. When an employee wants information about a company event or health benefits, or needs to track an expense report, the network is the place to go at Cisco. The upshot: More than 1.7 million pages of information are accessible by employees who use the Cisco network thousands of times every day. "We are," says Chambers, "the best example of how the Internet is going to change everything."

Technology aids and abets this business model, but it does not completely displace human interaction. "The network works better when you've already had a personal touch," insists Chambers. That's why he does quarterly meetings with employees at a nearby convention center, why all employees with the month of their birth are invited to one of his 1½-hour "birthday breakfasts," and why he works harder than most to encourage open and direct communication with all of Cisco's leaders.

Chambers also believes in partnering with other businesses. Plenty of companies forge links with others, but Cisco has a track record of making them work. "Partnerships are key to the new world strategies of the 21st century," says Donald J. Listwin, a Cisco senior vice-president. "Partners collapse time because they allow you to take on more things and bring them together quickly."

A good example is Cisco's partner-

if life came

er: A+. Family: A+. All-around your life is pretty good. After all, you pride yourself on always making educated choices. For you, there's the

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you'd be bringing home

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ship with Microsoft Corp., which last year resulted in a new technology to make networks more intelligent. The software lets networks know immediately a user's identity and location and to respond differently to each one. The partnership allows both companies to expand this market together more rapidly. "From initial discussion to technology, it took 18 months to get the product out," says Listwin. "It would have taken us four years to get to where we are [without such a partnership], and it's not clear we had the competence to get there alone."

Another theme—often heard but seldom exercised by corporate leaders—is the central importance of the customer. Nothing causes Chambers more restless nights than worry over how to serve customers better. That's why he spends as much as 55% of his time with customers and why he receives every night, 365 nights a year, voice mail updates on as many as 15 key clients.

"ARROGANT." In this new model, strategic direction is not formed by an insular group of top executives, but by the company's leading customers. It's an outside-in approach, as opposed to an inside-out. The customer is the strategy. "There is nothing more arrogant than telling a customer: 'Here is what you need to know,'" says Chambers. "Most of the time, you are not going to be right." Rather, Cisco's leading-edge customers are seen as partners in forming the company strategy. Example: After Boeing Co. and Ford Motor Co. informed Chambers that their future network needs were unlikely to be satisfied by Cisco, Chambers went out to make his first acquisition to solve the problem. That deal, to acquire local-area-network switchmaker Crescendo Communications in 1993, put the company into a sector of the industry that now accounts for $2.8 billion in annual revenue.

Even such tactical moves as acquisitions and mergers are seen differently by a new-world company. Rather than acquire merely to speed growth or swell market share, Cisco routinely employs acquisitions to capture intellectual assets and next-generation products. "Most people forget that in a high-tech acquisition, you really are acquiring only people," says Chambers. "That's why so many of them fail. At what we pay, at $500,000 to $2 million an employee, we are not acquiring current market share. We are acquiring futures."

While most companies immediately cut costs and people from newly acquired outfits, Cisco adheres to what it calls the "Mario rule"—named after Senior Vice-President Mario Mazzola, who had been CEO of Crescendo when it was bought by Cisco. Before any employee in a newly acquired company can be terminated, both Chambers and the former CEO must give their consent. "It tells new employees that Cisco wants them, that Cisco cares about them, and that we're not just another big company," says Daniel Scheinma vice-president for legal and gover ment affairs. "It buys the trust of t people . . . and their passion is worth lot more than any of the downside leg protection."

In talent-hungry Silicon Valley, Cis measures the success of every acqui tion first by employee retention, th by new product development, and fin ly return on investment. The compa has been phenomenally successful holding on to the intellectual assets buys: Overall turnover among acquir employees is just 6% a year, two pe centage points lower than Cisco's ov all employee churn. The company wor hard to embrace employees acquired deals, often giving top talent key jobs the new organization. Three of Cisc main businesses are led by former CE of acquired companies.

GOOD FIT. Every acquisition, moreov must meet Cisco guidelines. For yea Chambers watched IBM and other hig tech outfits acquire and then slow smother any number of entrepreneur companies. What he learned was th you never buy a company whose valu and culture are much different fr your own. Nor do you buy a compa that is too far away from your cent base of operations. The latter make cultural fit less likely and severely lim the speed a company needs to compe in the new economy.

Chambers also believes that each d must boast both short-term and lo term wins for customers, shareholde and employees. "If there are no resu in three to six months, people begin question the acquisition," says Cha H. Giancarlo, vice-president for global liances. "If you have good short-te wins, it's a virtuous cycle."

Through it all, the emphasis is on ing it faster, cheaper, and better—integral part of success in the new ec omy. At Cisco, wages are less imp tant than ownership. Some 40% of stock options at the company are h by "individual contributors" who on erage boast more than $150,000 in tion gains. Egalitarianism is critica successful teamwork and to mor "You never ask your team to do so thing you wouldn't do yourself," s Chambers, who flies coach and has reserved parking space at headquart

There are other leaders, of cou besides Chambers, who hope to cr an organization that may very well r olutionize the fundamental busin models of major global companies. he's surely in the "sweet spot," hel to write the new rules for managin

By John A. Byrne in San Jose, C

A NEW MANAGEMENT PRIMER

Some key lessons from Cisco Systems and other progressive companies:

NETWORK, NETWORK, NETWORK Technology allows links with customers, suppliers, business partners, and employees. So take advantage of the speed and productivity it affords.

FOCUS ON THE CUSTOMER Let your core customers determine your strategy. They know more about what they need than your top executives do.

BUY SMART Pursue acquisitions not to speed growth or increase market share per se, but to capture intellectual assets and next-generation products.

TEAM UP FOR SUCCESS Create alliances with partners based on trust and the potential for achieving mutual short- and long-term wins.

SHARE THE WEALTH Use broad-based stock option plans to reward and retain key employees.

THAT PERSONAL TOUCH Technology goes only so far. Face-time counts. Corporate leaders must spend lots of time coaching, mentoring, and communicating with employees in person.

VOICES **Clayton M. Christensen**

TITLE Professor, Harvard business school. 46.
CONTRIBUTIONS Christensen wrote the groundbreaking 1997 book *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail.* He argues that even well-managed companies have trouble coping with "disruptive" innovations that make their current technologies obsolete. **IN HIS WORDS** "The batting average for dealing with disruptive technologies is zero. If you want to survive, you have to create a separate company or attack yourself."

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ELECTRONIC COMMERCE

THE NET IS OPEN FOR BUSINESS—BIG TIME

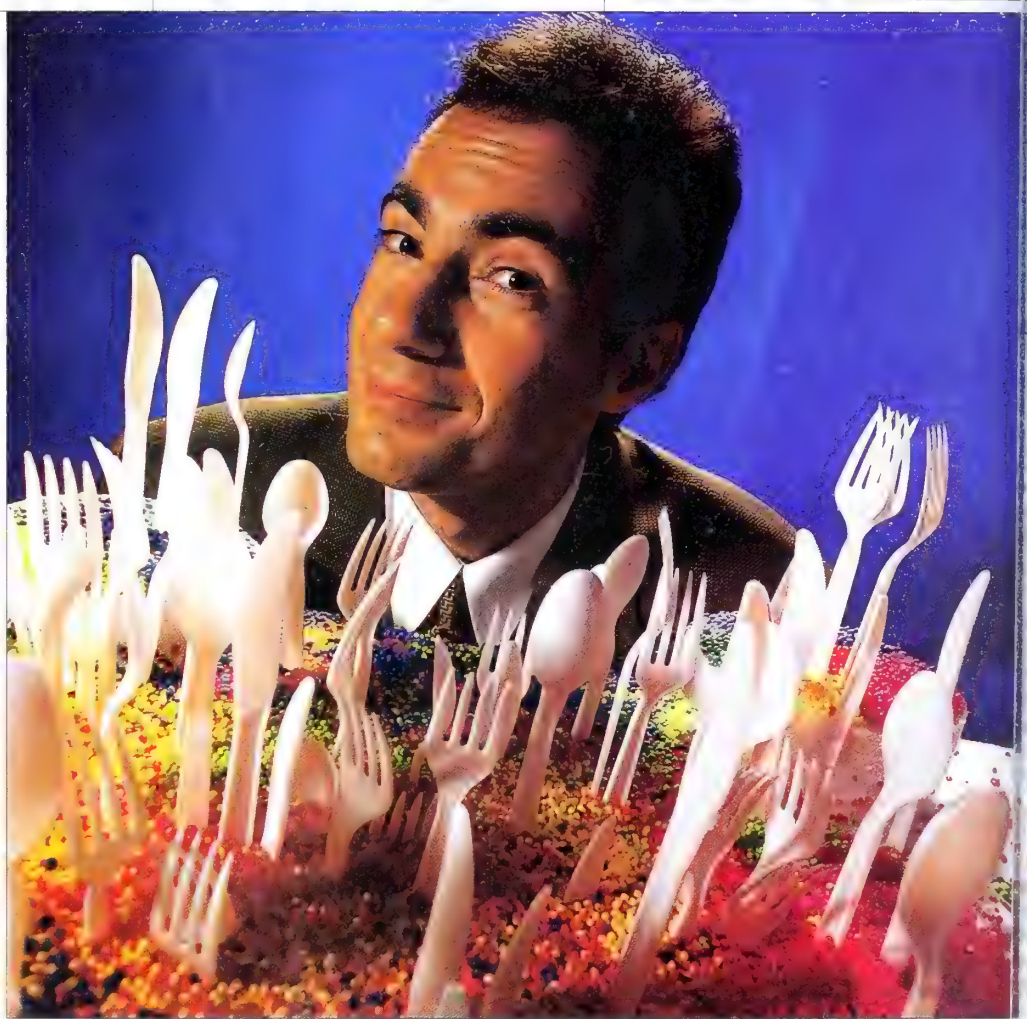
E-commerce is 'an absolutely unstoppable force.' In less than a decade, it could account for as much as 6% of GDP

Tim Stojka was just a toddler in 1967 when Benjamin Braddock, Dustin Hoffman's character in *The Graduate*, was offered the now-classic career tip: "Plastics!" So it's no surprise that Stojka added a '90s cybertwist. Three years ago, he and brother Nick took time off from running their dad's Chicago plastics company to start the Plastics Network, a Web site that connects buyers and sellers of plastic materials and equipment.

Now, a year after Stojka started conducting transactions on the site, 40,000 visitors a month shop for products from 150 sellers. Commerx Inc., Stojka's holding company for PlasticsNet, takes a 5% cut of transactions, far less than existing distributors, who charge up to 50%. The result: Sales are expected to jump over 300% this year, to about $7.5 million. That's just a tiny fraction of the worldwide plastics market, but the Net's potential to electrify commerce is jolting his industry. Says Joseph J. Liccese, who runs a Web site for Bayer Corp.'s Polymers Div., a PlasticsNet partner: "It's becoming an electronic world much faster than anybody in our industry thought."

Less than a decade after it opened for commercial activity in 1991, the Net is poised to turbocharge E-commerce into a blockbuster economic force. Market researcher Forrester Research Inc. figures that by 2002, Internet commerce among U.S. businesses alone will hit $327 billion, equal to 2.3% of gross domestic product. By 2005, Net commerce could jump to as much as 6% of GDP, reckons Forrester CEO George Colony.

Analysts see E-commerce making up a huge portion—20% to 60% or more—of such industries as computers and software, catalogs, energy, and books. As a result, E-commerce seems certain to provide much of the fuel that will



BREAKING THE MOLD Stojka's Web site, which connects buyers and sellers of plastic goods, gets 40,000 visitors a month

r the 21st Century Economy. Says
b Chief Executive Joe Firmage,
sets up Web sites for companies
as NBC and Harley-Davidson:
tronic commerce is an absolutely
ppable force."

'eady, there are glimpses of in-
ole efficiencies to come. Starting
rly 1999, Canadian Imperial Bank
mmerce in Toronto will start ag-
ating orders among departments
'eater discounts and sending them
'onically to suppliers using an In-
procurement program from Ariba
nologies Inc. The bank expects to
almost $100 million on its $1.3 bil-
n annual purchases.

d it's not just big companies that
ake advantage of such savings.
that the Net lets even small man-
rers communicate intimately with
le suppliers and subcontractors,
'e eager to farm out more tasks,
as inventory management and cus-
service—freeing them to focus
nat they do best, such as product
n or marketing. "Companies are
g: 'Do I really need to do that part
business?'" says Malcolm Frank,
vice-president at Boston consul-
Cambridge Technology Partners.

E SAVINGS. One early sign: Some
food-service operators have turned
still Corp. in Palo Alto, Calif., as
virtual order desk. Instill auto-
and tracks purchases for restau-
eliminating the time and errors of
and fax orders. CEO Mack Till-
x-operations manager for a brew-
hain, expects to process some $1
n in orders this year, from $180
n last year.

tablished companies are starting
the Web to reinvent themselves,
ne pioneer: W. W. Grainger Inc., a
ar-old supplier of maintenance, re-
and operating supplies from mo-
o light switches. Since 1995, when
its entire 80,000-product catalog
, its Web sales have risen 60% to
a quarter, with an average trans-
of $250, nearly double the offline
ge. Hoping to capture a broader
of customers, Group President
d E. Bielinski is designing a site to
r outside suppliers as well.

t the next wave of Internet com-
will present as much of a threat
h middlemen as it offers opportu-
or startups. After all, warns Steve
on, co-director of Andersen Con-
g's global electronic-commerce pro-
"Your competition is always going
just a click away." The new wave
ot just save money but create new
onic marketplaces—quickly turn-
siness models on their heads.

It's hard to find a more agile somersaulter than online bookseller Amazon.com Inc. Even though it's still losing money during its expansion phase, analysts say it's successfully busting the rules of bookselling. Despite offering 3 million titles, vs. 175,000 for a Barnes & Noble superstore, Amazon carried only $17 million in inventory last quarter—2% of Barnes & Noble's. And while buyers pay Amazon instantly with their credit cards, it doesn't pay publishers for the books until about 46 days later—a tidy float that reverses the economics of physical stores.

The result: $240,000 in sales per employee, vs. $100,000 at Barnes & Noble. "Amazon isn't about technology; it's about changing the business model," says venture capitalist Ann Winblad of Hummer Winblad Venture Partners in San Francisco. Indeed, the Net's unique economics may well allow a host of upstarts to commandeer wide stretches of their industries. Winblad's partner J. William Gurley calls them vortex companies: Once a site gathers a mass of buyers by offering useful product information, in swirl sellers, whose products draw more buyers in a fast-moving cycle that leaves rivals high and dry. Presto: One dominant player emerges. Sound familiar? Think Microsoft. Suddenly, it's software economics all over again, but in every industry. The leaders see increasing, not diminishing, returns as they expand.

It is these kinds of opportunities that help explain why one-time mortgage-brokerage owner Christian A. Larsen started E-Loan Inc. in Palo Alto three years ago. The goal: to enable homebuyers to bypass mortgage agents, who he says do little but add $1,500 to the cost of a mortgage. Last month, Larsen processed $70 million worth of loans, and E-Loan is growing 25% a month. "We take out all the steps in between the buyer and the mortgage-capital markets," he says. "The Internet accelerates this consolidation."

As the Net brings interaction costs to near-zero, experts say there's little reason not to have competitive bidding on almost any product. FreeMarkets Online Inc. in Pittsburgh runs an auction for suppliers and buyers of such industrial products as steel parts and printed circuit boards. It doesn't take possession of goods but does everything else: identifies suppliers, finds buyers, and runs the auction. CEO Glen Meakem expects to handle $500 million in deals this year, up fivefold from 1997, and to post gross sales of $7 million.

Just emerging are exchanges such as Energy Marketplace, a site started last year by Southern California Gas Co. to let energy buyers shop for deals among a host of small and midsize gas providers. And in a few years, automated "bots," or programs that search the Net for the best prices on particular products, may even set off rampant price wars. Says Esther Dyson, chairman of EDventure Holdings: "You'll see more real-time pricing."

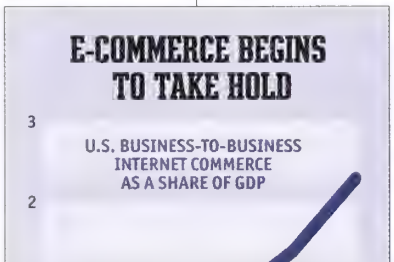
And maybe even real-time marketing and product design. Amazon.com, for instance, uses software that collects information about consumers' preferences and buying histories to offer instant recommendations on other books. Says Amazon.com CEO Jeffrey P. Bezos: "We want to be like a small-town bookseller who knows your tastes." Book distributor Ingram Book Group, Amazon's chief supplier, is even developing technology to print books one by one as orders come in—potentially changing the economics of publishing.

Given the rapid pace of change, nobody really knows how deep an impact E-commerce will make. But they're about to find out.

By Robert D. Hof
in San Mateo, Calif.

VOICES **Chris Larsen**

TITLE Co-founder, E-Loan Inc. 37.
CONTRIBUTIONS The former mortgage broker wants to use the Net to connect consumers directly to banks—cutting out brokers. His key insight: As the Net eliminates barriers of time and geography, it exposes huge inefficiencies in the economy.
IN HIS WORDS "The power in the New Economy is either with the consumer or at the point of production. We take out all the steps in between."



STREAMLINING Solectron's plants make dozens of brand-name electronics

STRATEGIES

SOUPING UP THE SUPPLY CHAIN

Today's supercontractors are turning manufacturers into models of efficiency

Even in this "just-in-time" age, the production line that churns out Hewlett-Packard ink-jet printers in Newark, Calif., is impressive. In response to electronic orders from customers around the country, parts trucked in moments earlier are loaded onto a 110-foot assembly line. Finished printers fly off the other end—and soon are aboard another truck heading to a distributor. The operation is seamless and speedy. But then, what would you expect from one of America's premier high-tech corporations?

You might think the factory belongs to Hewlett-Packard Co. Instead, it's owned by Solectron Corp., a contract manufacturer. What's more, even as Milpitas (Calif.)-based Solectron pumps out HP's printers, its 24 production lines are simultaneously assembling everything from pagers to television decoding boxes for some of the biggest brand names in electronics.

Solectron is part of a new breed of U.S. supercontractors that promise to revolutionize manufacturing well into the next century. They command dozens of factories and supply networks around the world. Increasingly, they also manage their customers' entire product lines, offering an array of services from design to inventory management to delivery and after-sales service. Their unusually flexible operations are surprisingly profitable, producing returns on assets in the range of 20%.

"Outsourcing," a practice that has been around for decades, doesn't begin to describe the phenomenon. In place of traditional contracting relationships between client and supplier, arrangements with companies such as Solectron represent a sort of extended enterprise—a set of partnerships between product developers and specialists in components, distribution, retailing, and manufacturing.

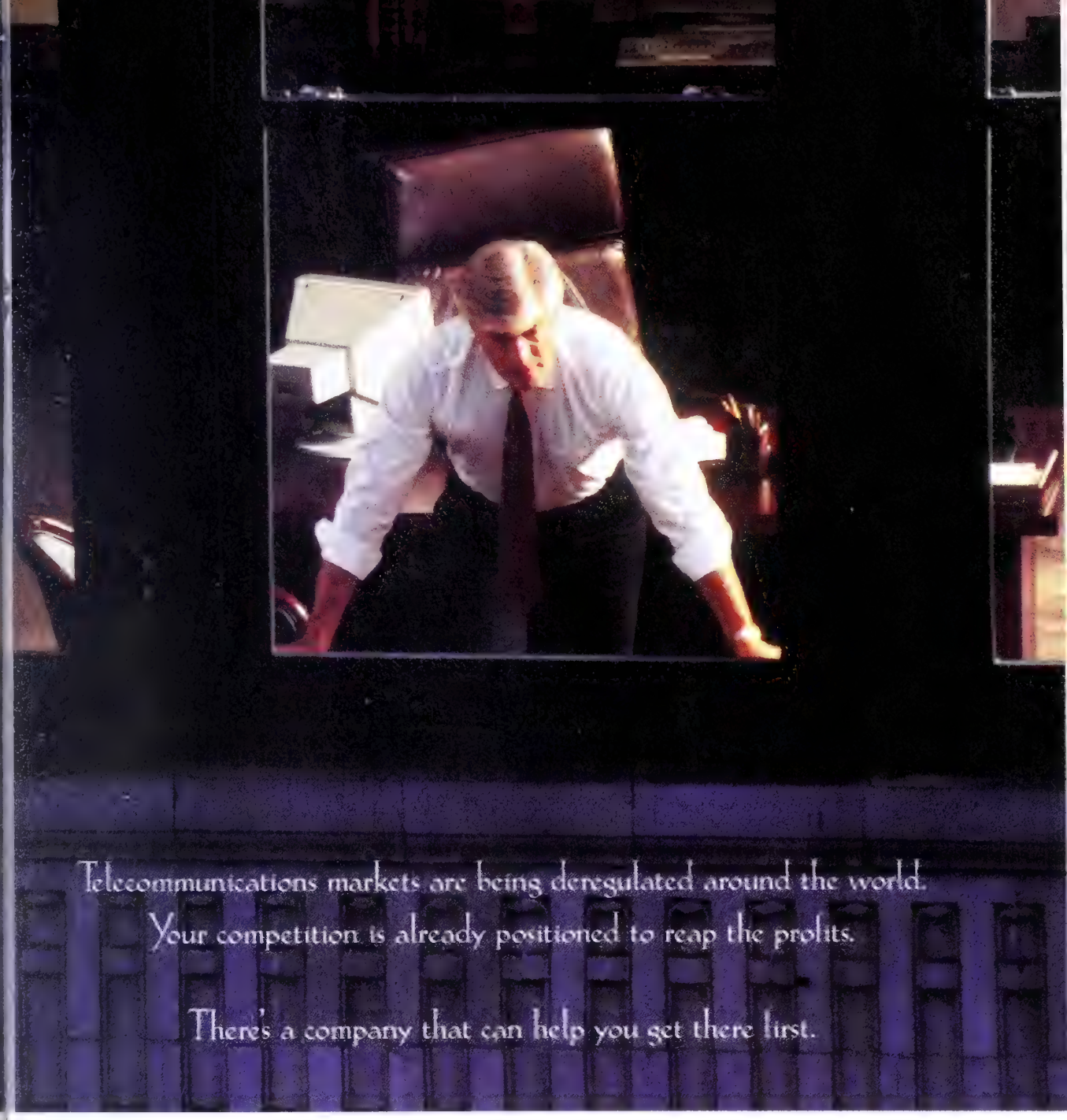
The resulting organization can be so tight as to behave like a single, close-knit company—only better. Its strategies can slash time and costs out of the supply chain, the process between the invention of a new product and the time it reaches the consumer. Customers say they have achieved cost efficiencies of 15% to 25% already. And that, says James E. Morehouse, a logistics expert at A.T. Kearny Inc., is only 5% to 10% of U.S. industry's potential savings.

BUSTED BARRIERS. The effect on innovation could be huge. Spinning off manufacturing and other noncore functions allows industrial titans to focus new investment where it gets the most bang—on research and marketing. Because the strategy reduces the need for capital and in-house operations expertise, moreover, startups face far lower barriers in bringing new technologies to market.

In 1996, for example, Egyptian-born engineers Zaki and Shlomo Raqib ca

VOICES **Hasso Plattner**

TITLE Co-founder and vice-chairman, SAP. 54.
CONTRIBUTIONS His German software giant virtually cre the market for enterprise software—huge systems that contr the operations of global corporations. **IN HIS WORDS** "Th boundaries between companies will blur as they view themse as part of an ecosystem, supply chain, or value chain. Compan may choose to outsource their entire distribution, warehousi and logistics to a partner such as Federal Express Corp."



PEEDING SUCCESS Opportunities in newly deregulated markets are huge. But so are the headaches.When ng is critical, you need a company with experience. Nortel has helped create the three largest competitive vorks in North America, the second and third national networks in the United Kingdom, and competitive networks lexico, Japan and Brazil, to name a few. We understand that speed-to-market, rapid service deployment satisfied customers are the way to get to the profits—first. So why wait? For more ils, visit www.nortel.com/success2. Or call us at 1-800-4NORTEL. We'll help speed your success.

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up with a modem, capable of advanced services such as teleconferencing, that could be deployed over any cable system without needing costly upgrades by cable operators. But while their Santa Clara (Calif.) company, Terayon Communications Systems Corp., had $45 million in venture capital, it lacked manufacturing facilities. So it went to Solectron, and four months later Terayon's modems were being shipped to cable operators in the U.S. and abroad. In terms of manufacturing capability, boasts Zaki Raqib, "this puts us on a par with the Motorolas of the world."

COST BENEFIT. Far from eroding American industry, the new manufacturing paradigm is one of the surprise strengths of America's high-tech economy. Because independent contractors can better meet demands for quick delivery, the U.S. is actually becoming more competitive as a production base—even in mass-volume assembly work. As Asia's cheap wages are offset by higher shipping costs, "the cost difference between the U.S. is now virtually gone," says Michael E. Marks, chief executive at Flextronics International USA Inc., a major contract manufacturer.

Not everyone is abandoning their factories. Compaq Computer, Intel, National Semiconductor, and Merck are among the corporate giants that keep manufacturing in-house to protect their competitive edge. They fear losing control over intellectual property and quality, or that secrets will leak to competitors. They also worry about losing touch with clients and industry trends.

But in many industries, vertical integration is giving way to virtual integration. General Motors Corp.'s Aug. 3 decision to spin off its $31 billion Delphi Automotive Systems components unit is part of the auto industry's shift toward "modular" production, where prefabricated chunks with scores of parts are supplied by outsiders and bolted together at the last minute. Delphi, for example, makes full instrument panels for M-class sport-utility vehicles assembled at Mercedes Benz's modular plant in Vance, Ala. Some experts believe the Big Three also will eventually sell off their engine and auto assembly plants.

The same trend is emerging in pharmaceuticals, where the cost of bringing a new drug to market—as high as $500 million—and the high risk of failure have long been barriers to entry. Covance Inc., one of the world's largest contract research organizations for drugmakers, has just opened a $55 million plant in North Carolina's Research Triangle Park that CEO Christopher A. Kuebler likens to a "sterile version of a microbrewery," capable of making up to five biological drug products simultaneously. Among its first customers is seven-year-old StressGen Biotechnologies Corp. of Victoria, B.C., which has hired Covance to make its new vaccine for treating cervical cancer.

The movement is much further along in electronics, where a $90 billion contract manufacturing sector is growing three times faster than overall electronics sales, according to Technology Forecasters Inc. of Alameda, Calif. Semiconductor startups can turn to a growing number of silicon-wafe foundries—highly flexible shops willin to produce small runs of a few thou sand units at first and ramp up to mas production if demand takes off. That a lows "fabless" Silicon Valley desig houses like Xilinx Inc., 3Dfx Intera tive, and Broadcom Corp. to market ir novative telecom, graphics, and vide chips that power the myriad multimedi gadgets of the Digital Age. With bi lions of dollars in new capacity comin online, analysts expect the supply new chips to explode.

As virtual integration evolves, futu ists envision a time when product d velopers, manufacturers, and distrib tors will be so tightly linked throu data networks that inventory will but disappear. Companies will ma goods based on the daily needs of r tailers. Even automobiles will be a sembled to a customer's specificatio within days, just as Dell Comput Corp. and Cisco Systems do now wi computers and networking equipment. sunset industry no longer, manufacturi will help drive innovation.

By Pete Engardio in Milpitas, Ca

ALABAMA PLANT Delphi supplies instrument panels for Mercedes trucks

FASTER, CHEAPER, SMARTER

How the new manufacturing model boosts U.S. competitiveness

INNOVATION Startups can get their products to global markets without having to build their own factories—so barriers to entering many industries drop away

EFFICIENCIES Because contract manufacturers manage much of the supply chain, companies can slash inventory and distribution costs while radically shrinking time to market

CAPITAL Product companies get higher returns on investment since they can focus spending on R&D and marketing rather than on capital-intensive production facilities

COMPETITIVENESS Time to market is superceding labor costs in determining market success, giving the U.S. a big advantage for goods made and sold in North America

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NEW GIG Mill workers have been retrained for Marubeni Denim

DEVELOPMENT

AN OLD MILL TOWN'S NEW PATTERN

Like most river towns, Columbus, Ga., long has been defined by the enterprises that have lined its waterfront. Through most of this century, textile mills along the Chattahoochee River were its lifeblood. Today, with many of those mills abandoned, a new centerpiece is rising: a $100 million headquarters for one of the world's largest credit-card processors, Total Systems Services Inc.

Total Systems is everything the old Columbus wasn't and everything the new Columbus strives to be. Its mainframe computers verify creditworthiness for transactions from Birmingham to Bali. An army of technical employees keeps the systems running, and a world-class telecom infrastructure links them to customers around the world.

CHANGE ARTIST. The 21st Century Economy poses a simple ultimatum to many cities tethered to an industrial past: evolve or die. Columbus, Georgia's second-largest city, has adapted by educating its workforce and internationalizing its corporate roster. It has nurtured huge employment engines such as Total Systems and $7.3 billion AFLAC Inc., another global, systems-driven competitor. Technology has enabled newcomers such as Carmike Cinemas Inc. to make Columbus their home.

This transformation hasn't been painless. Even as employment booms in information services, the mills today employ just 42% as many as in 1973. And 23% of residents live below the poverty line. "One thing you start to think of is, are people being left out?" frets Robert S. Johnson, dean of Columbus State University's business school.

Even so, the city's employment has jumped 21% in the last decade, and the population is up 4%, to 181,000. Why? A decade ago, Columbus realized that intellectual capital and communications systems were more important than looms. So the city invested in people,

COLUMBUS' FAST TRACK

Employment Growth, 1990-97

	TOTAL NON-FARM	SERVICE SECTOR	FINANCIAL SERVICES
COLUMBUS	15.9%	21.0%	27.9%
U.S.	12.1%	15.7%	5.7%

DATA: BLS

making the most of Georgia's in novative training programs. Th best, the Intellectual Capital Par nership Program, allows up to 5(Columbus State students to re ceive $10,000 loans that are fo given if they work in Georgia f four years after graduation. Suc strategies helped solve a labo shortage that, two years ago, ha Total Systems considering mo ing to Atlanta; now, it plans t expand its Columbus workfor from 3,200 to 5,000 by 2000.

The city's telecommunication network, meanwhile, has fed itself. The presence of Total Sy tems, AFLAC, and Blue Cross Blue Shield of Georgia Inc.—a big, information-dependent cor panies—prompted BellSouth Cor to equip Columbus with enou T-1 lines and frame relays serve a city several times its size. AFLAC beams processed claims and a tuarial formulations on high-speed da lines to Japan, its biggest market. A Carmike Cinemas, the nation's secon largest movie theater chain, is based town mostly because CEO Mike Patri can use advanced software to monit everything from systemwide box-offi receipts to soft-drink sales in Sio Falls, S. D., from his desktop PC. "Wit out the system, we would have had move to Atlanta," Patrick says.

JOB SHIFTS. Manufacturing hasn't d appeared. Rather, Columbus is attra ing new, vigorous plants—some foreig owned. Japan's Marubeni Denim facto is viable because the North Americ Free Trade Agreement allows it to sh finished denim duty-free from Georgia Mexico for cutting and sewing. Wh sealed the deal, though, was Columb offer of reliable, nonunion workers, st training programs, and green-field velopment sites.

Marubeni is taking on hundreds refugees from the older mills—and, guably, giving them better work. T downside: Its new looms require ji half the number of workers to produ five times as much fabric. Yet many those left behind are working now service jobs at places such as AFLAC a Total Systems. The base of employers more diverse, offering insurance agai cyclical downturns. And the town is sitioned to grow with industries such financial services and health care t will thrive in globalizing markets. Sl ly, Columbus is evolving—and thrivi

By David Greising in Columbus,

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TRADE

TWO STEPS FORWARD, ONE STEP BACK

Asian crisis or no, globalization is on the rise—promising both greater opportunities and higher risks

Since the devaluation of the Thai baht in July, 1997, the fast-growing open economies of Asia have been roiled by a series of currency, stock market, and banking crises. No country on the Pacific Rim has been spared—even Japan, whose global industrial might has been undermined by the government's reluctance to jettison its failed policy. And with the Asian locomotive running in reverse, all the open economies of the emerging nations—from Latin America to Eastern Europe—have been hit hard. Even the developed, commodity-producing countries, such as Canada and Australia, have been hurt.

These shocks will not end globalization but are stark evidence of its double-edged nature. Short of war or an epidemic of market-closing, inward-turning policies, most countries in the 21st century are likely to keep pursuing globalization despite the minuses. Goods, labor, and capital will criss-cross the globe as never before. Why? The benefits are just too good to pass up. History shows that access to larger markets spurs innovation, while competition prods businesses to do things better and cheaper. Free trade also promotes the movement of people and ideas across borders, providing the yeast of creativity and invention.

If current trends continue, world exports of goods and services will reach $11.4 trillion by 2005, or 28% of world gross domestic product, according to forecasts by Standard & Poor's DRI, nearly double this year's projected $6.5 trillion, or 24.3% of world GDP. World trade's share of GDP 20 years ago was a mere 9.3%.

But the benefits of growing trade, innovation, and growth go hand in hand with greater vulnerability to the vicissitudes of the global financial marketplace. Financial capital surges back and forth across borders on waves of optimism and pessimism far faster and in volumes several times greater than two decades ago. Inflows of foreign monies finance growth, but sudden withdrawals can trigger downturns.

The many successes of Asia's economies—and their continuing troubles today—offer an early demonstration of how globalization may play out. Despite the troubles in Asia, living standards in developing nations are higher than they were 20 years ago—and, after some very tough times, growth is expected to rebound. But right now, for millions of people in Indonesia, Thailand, and Korea who are feeling the pain of poverty and unemployment, globalization hardly seems worth the effort. After boasting annual GDP growth of nearly 7% in the 1992-97 period, the economies of Asia's middle-income countries are shrinking dramatically.

NEW CONSENSUS. An understandable backlash against the free flow of goods and capital is developing in some quarters. Foreign money managers and the International Monetary Fund have been demonized by some in Asia, and protectionist tendencies have been fanned even in the world's richest country because U.S. exports are losing buyers and the trade deficit is widening. To ensure that markets remain open and that globalization fulfills its promise, a new consensus will have to develop for managing the process—steering vulnerable economies past the most dangerous shoals and copin better with shipwrecks when they occur. U.S. monetary officials have spoken about the need for a "new global financial architecture," and over the next few years, it should begin to take shape. At the least, this should involve buttressing IMF nances and introducing new IMF procedures for assessing country risk. At its most ambitious, a new architecture will involve the private sector and nongovernmental institutions more actively in economic decision-making.

Whatever the nature of such a consensus, several critical factors—from information and transportation technology to existing trade and market-opening agreements—will continue to boost trade and investment. "There's a lot of oomph left in globalization, and [the Asia crisis] won't put an end to it

BOOMING TRADE IF CURRENT TRENDS CONTINUE, WORLD EXPORTS OF GOODS AND SERVICES WILL REACH **$11 TRILLION** BY 2005, OR 28% OF WORLD GROSS DOMESTIC PRODUCT, UP FROM A 24.3% SHARE THIS YEAR. TWENTY YEARS AGO, TRADE'S SHARE WAS A MERE 9.3%.

says Rudi Dornbusch, an economist at Massachusetts Institute of Technology.

Even with Asia in recession, cross-border investments are likely to grow for years to come. Countries need one another, and they can't just will that dependence away. "There's only one thing worse for Asia than foreigners buying up assets on the cheap—and that's foreigners not buying up assets on the cheap," observes C. Fred Bergsten, director of the Institute for International Economics. Asia needs foreign capital—private as well as official—to rebuild.

VOICES **Lawrence H. Summers**

TITLE U. S. Deputy Treasury Secretary. 44.
CONTRIBUTIONS The Administration's international eco-strategist is pushing for a "new financial architecture" to help emerging economies adapt to quicksilver markets. **IN HIS WORDS** "The emergence of global financial markets can be likened to the invention of the jet airplane. We can go where we want more quickly . . . and most of the time, more safely—but the crashes, when they occur, are that much more spectacular."

Similarly, every currency crisis in Latin America stirs up talk about erecting barriers to foreign capital or reversing privatizations. In the end, though, "populists also want money," says MIT's Dornbusch. Some countries, such as Chile, have put restrictions on capital inflows to insulate the economy from sudden withdrawals, but even Chile lately moved in the opposite direction: Deciding the country wasn't getting enough capital, officials slashed the central bank's reserve requirement on short-term foreign inflows from 30% to 10%.

Most important for promoting continued globalization, even if there are no further market-opening trade agreements, will be ever-improving technologies for transport and communications, says Douglas A. Irwin, an economist at Dartmouth College. Trade volumes will likely soon revert, after a one- or two-year slowdown, to the recent historical 7%-8% annual growth rate, says Gail Fosler, chief economist at the Conference Board.

Even as trade grows, however, financial crises are likely to keep erupting. That's because global investors are naturally jittery, and they can act on their emotions in a trice. What needs to happen to ameliorate the financial perils of globalization? For one thing, developing nations should not hesitate to participate more fully in financial markets. This may sound like jumping from the frying pan into the fire, but it isn't. Barry Eichengreen, an economist at the University of California at Berkeley, argues that a big problem in Asia was that many countries persisted in pegging their exchange rates, and local and foreign businesses alike put credence in avowals of exchange-rate stability. If more countries allow their currencies to float, businesses won't expect governments to guarantee certain exchange rate, and they'll be forced to hedge by buyin currency futures to protect themselves.

Then, too, in coming years, banks and other lenders and i vestors should be forced to swallow some losses when troub hits. A huge problem in recent financial crises has been th obscure issue of "moral hazard"—when private lenders thro good money after bad on the assumption that they will b bailed out by an international lender of last resort—that i the IMF. One solution: get the private sector to take a bigg role, and thereby reduce moral hazar Catherine L. Mann, a senior fellow the Institute for International Econor ics, suggests new forms of credit insu ance and rollover insurance that w better match risk and return in emer ing countries and sort out or tier d ferent borrowers according to the creditworthiness.

It's critical to involve the private se tor more because the resources of inte national institutions have been strained to the breaking poi by recent crises. The IMF had to dip into a little-used fund help finance its part of the latest $22 billion aid package to Ru sia, and members of Congress have been tying approval of ture U. S. funding of the IMF to issues ranging from envir mental to abortion policies. Hence the call for a new glob financial architecture.

Economists, financial experts, and former officials have fered up a grab bag of IMF reforms: The IMF should upgrade staff to do more rigorous risk analysis. The IMF should more "transparent" in its deliberations, announcing, through "early warning system," when countries are in trouble a detailing aspects of negotiations with government officials.

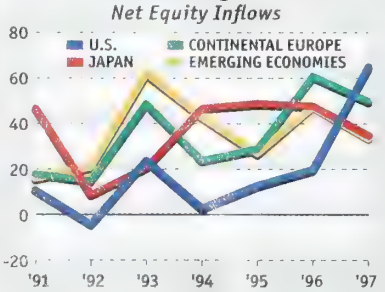
DIFFERENT GRADES. A new Bretton Woods parley should revi the global economy and put corruption-fighting at the top of agenda, says Edward Yardeni, chief economist at Deutsc Bank Securities Inc. in New York. The IMF should have ferent grades of membership, suggests David D. Hale, economist with the Zurich Group in Chicago. Environmen and labor issues should be addressed in trade negotiatio says Dani Rodrik, an economist at Harvard University's Jo F. Kennedy School of Government.

Eichengreen, who was an adviser at the IMF last year, lieves some changes would create a good deal more harm th good. Publicizing problems in individual countries, for instan could bring on the very crisis that the IMF would hope avert. Environmental and human-rights issues, says Jagd Bhagwati, a professor of economics at Columbia University,

CHANGING FORTUNES

Hot Money Flows

Net Equity Inflows



▲ BILLIONS OF U.S. DOLLARS

DATA: CROSSBORDER CAPITAL

Uneven Growth

Annual percent change in gross domestic product

	1992-97	98E
U.S.	3.1%	3.4%
JAPAN	1.5	-2.7
EUROPEAN UNION	1.8	2.7
ASIA, MIDDLE INCOME*	6.8	-3.7
CHINA	11.0	5.0

*Indonesia, Korea, Malaysia, Philippines, Taiwan, Thailand

DATA: STANDARD & POOR'S DRI

Jittery Currencies

Annual percent change in index of local currency

	1992-97	98E
U.S.	1.7%	3.1%
JAPAN	3.1	-6.0
INDONESIA	-6.2	-45.8
KOREA	-1.2	-40.0
THAILAND	-0.8	-21.1

*Measured against a weighted basket of foreign curren

DATA: STANDARD & POOR'S DRI

KOREAN IMF PROTEST Experts, too, are calling for reforms

eft off the table at trade negotiations, though they may nerit consideration in other forums.

t clearly, something needs to be done. Asian nations have :ened to set up their own regional IMF, which would re- financial flows and make trade more regionalized. Right Asia is too weak to pull off such a move. But if the IMF o get the necessary funding and doesn't adapt its policies ning years, a revived Asia could well decide to pull away.

omic leaders attending the 1944 on Woods meetings surely never ned that the IMF would evolve into world's chief financial firefighter—ney did expect it to help ward off l factionalism.

e insular response to globalization nave some political appeal, but for-ely, it is not holding sway. Even to-asian nations are moving to open up financial sectors and restructure banks. That's important, but it won't be enough. Today, thing from intracompany trade to E-commerce challenges urisdiction of the nation-state, argues Wolfgang H. cke, an economist at the World Bank. Eventually, private and nongovernmental institutions will have to assume public functions and work with governments to set in-tionally accepted standards of behavior. A form of "mixed ution" will develop, meaning that governments, multilateral izations, and private companies will all monitor risk.

There are precedents. The bank-capital standards set forth in the Basle Accord of 1988 and its later amendments, concluded by central banks, shifted some regulatory burden to commercial banks. Banks take on the risk assessment of their portfolios, with central bank supervisors looking over their shoulders. The accord set globally accepted standards of capital adequacy which, while not met by all banks in all countries, nonetheless provide a benchmark for regulators and investors. In other arenas, from accounting standards to privacy on the Internet, public policy will take on a global aspect. "We have to establish a public policy framework that's equivalent to this dynamism," says Reinicke. Otherwise, people and companies won't be able to fully exploit the benefits that globalization should bring to more and more nations in the 21st century.

By Karen Pennar in New York

VOICES Geoff Mulgan

TITLE Founder and director of Demos think tank. 36.
CONTRIBUTIONS Mulgan advises Prime Minister Tony Blair on positioning Britain in the wired economy. People and societies, he warns, must upgrade skills or slip behind. Hence, his "University of Industry," a national lifelong learning program.
IN HIS WORDS The new economic "paradigm is only half true. Knowledge-based industries are creating a huge number of jobs. But many service jobs are not that different from 100 years ago."

GREAT NOTION Internet Bookshop CEO Latham couldn't find funding

INVESTMENT

A HIGH-TECH EUROPE IS FINALLY IN SIGHT

Deregulation, the euro, and a flood of venture capital will help companies soup up lagging innovation

Hasso Plattner has good reason to feel lonely. From his perch in the middle of Europe, the billionaire co-founder and joint chairman of German software titan SAP sees few success stories like his in the Old World. Outside of SAP and Scandinavian telephone powers L. M. Ericsson and Nokia Corp., Europe's high-tech galaxy is painfully short of bright stars. And Plattner thinks he knows why. "We're not good at hype," he grouses. "While the Europeans wait for a product, the American market throws money at hype. That's how companies get started."

Hype alone may not dictate high-tech success. But if money is the true measure, Europe finally appears to be catching on. Venture capital in search of less saturated markets is pouring in from America. And on new small-company exchanges in Germany and France, American and European investors alike are tossing money at fledgling high-tech businesses. Germany's Neuer Markt, one such exchange, is up 150% this year and has tripled its listings, to 43.

Continentwide deregulation and the movement toward a single currency by 2002 are driving this spending. Equally important, though, are massive investments in new pan-European communications networks. They could trip off an explosion in everything from tech startups to Internet services. This process is well under way in Britain and Scandinavia, which pioneered deregulation in the 1980s. Now, the rest of "Europe is about to follow suit," says Luc L. Soete, director of the University of Maastricht's Maastricht Economic Research Institute on Innovation & Technology. Adds James Richardson, president of European operations f switching-equipment maker Cisco Sy tems Inc.: "Market liberalization is g ing to free up investment in Europ and the money's going to go into hig tech. A new economy is going to b built as a result."

Indeed, it's far from fanciful to thin that by say, 2005, Europe may hav significantly closed its technology ga with the U. S.—an incredible prospec given that as recently as a decade ago took six months or more to get a ne phone installed in places like Belgiu Now, for one thing, Europe is well-p sitioned to pioneer the next generati of Internet appliances. Dutch consume electronics giant Philips and France Thomson Multimedia, along with Alcat are leading development of Web-su ing alternatives to PCs, such as telev sion set-top boxes.

WIRED SOCIETIES. And in mobile tel phony, Europe holds a wide lead ov the U. S. because it has created a u fied digital market allowing callers roam from nation to nation using t same phone. This gives Nokia a Ericsson a vast laboratory for develo ing next-generation cell phones that c surf the Net. While the U. S. debat technical standards, Europe, like Japa is racing to build up infrastructure th should be ready soon. Europeans cou be videoconferencing and even dow loading movies over their mobile phon within three years.

Tiny Finland, with a population just 5.1 million, shows just how quick the transformation can occur once t right elements are in place. Power by the 34% sales growth at $9.8 billi Nokia and by continuing telecom der ulation that began in the 1980s, Finla is rapidly becoming one of the worl most wired societies. Some 40 pho companies are now slugging it out the telephone market, building a wor class infrastructure in Finland and le ing to some of the lowest phone ra in Europe. Now, cheap calls are creasing the Internet's popularity, a

Technologically the U.S. is still far ahead. But the Continent could come close to catching up in less than a decade

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rock-bottom cell-phone rates have boosted usage to 48%, one of the highest levels in the world. One result: For the first time in history, Finland is exporting more electronics than forestry products.

A similar transformation could occur in the rest of Europe. The overall European economy grew only about 2.7% last year, but spending on telecommunications services jumped at 9%, according to International Data Corp. Investments on information technology rose yet faster, at 11%, to $196 billion. That's less than in the U.S., where spending jumped 12.4%, to $320 billion. But as recently as 1994, European IT spending grew by only 6% annually.

Rising market forces could make Europe's tech market more efficient. One catalyst is likely to be the new 11-member single-currency union. Monetary union will pull together the Continent's fragmented consumer market and make small credit-card transactions—crucial for Internet commerce—less costly than they are with currency exchanges. It also should dramatically boost the size of Europe's anemic stock markets, giving tech companies another avenue for funding rapid growth. That could help solve one of Europe's nagging problems: By one estimate, only 13.3% of European small companies are in high tech, vs. 22.7% in the U.S.

PRICE WARS. Another key to boosting Europe's tech future will be the ongoing revolution in European telecommunications. Most big Continental nations deregulated telecommunications on Jan. 1; Germany's and France's markets are now among the most open in the world. In Germany, for instance, more than 200 upstarts have jumped in, forcing prices for many long-distance calls down as much as 40%. Germany and other nations also have awarded multiple licenses for selling cellular-phone service—a change that has touched off torrid competition. As the price wars spread, domestic long-distance rates, which are often double or more U.S. levels, should fall dramatically, fostering a huge increase in traffic and new services.

In the PC business, prices already have plunged below U.S. levels since last fall. In Germany, late-model Pentium PCs go for as little as $830, with a monitor and including taxes, at mass retail outlets. Such price-slashing is one reason Europe is becoming the world's fastest-growing major PC market, with purchases up 17.8% in the first half of 1999, vs. the same period a year earlier.

At the same time, Europe is shifting almost as quickly as the U.S. to high-speed data networks. Powering the change is the estimated $125 billion that European companies are spending to prepare their computers for the coming euro. While they're at it, they're also revamping for the Internet and networks that allow simultaneous transmission of voice and data messages. These investments should push down telecom costs to a fraction of those in conventional phone networks.

A raft of companies, including the U.S.'s WorldCom Inc. and Viatel Inc. and such European entrants as Britain's Colt Telegram Group PLC, are pouring billions into pan-European voice-data networks. Europe's info-tech spending will skyrocket as cheap, high-speed communication becomes ever more common, predicts Cisco's Richardson. "For Europe to be globally competitive, it has to provide more telecom services at better prices," contends Glenn Potter, president of Britain's Esprit Telecom Group PLC, which also is building a pan-European network.

Still, it will be a long time before Europe's high-tech economy reaches the U.S.'s level of vibrancy. One measure of weakness: Only 24% of European households have computers, vs. 46% in the U.S., IDC figures. That's one reason the proportion of Internet-connected households stands at just 11% in Scandinavia, 8% in Britain, 6% in Germany, and 2% in France—vs. 18% in the U.S. "Effectively, Europe is still very weak in high tech," admits Alexis Jacquemin, ch economic adviser to the Europe Commission.

Europe still must boost its relati paucity of high-tech manufacturing a R&D, areas still dominated by Americ and Japanese companies such as H Cisco, and Sony. High tech account for just 20.4% of value added in Eu pean manufacturing in 1995, compar with 24.7% in the U.S. And last ye Germany, Italy, and France all spent l of their GDP on R&D than did the U Those gaps may narrow as local pow such as SAP and Nokia explode, and Internet development, late out of t gates, catches fire. Even in the onl world, however, "it matters a lot t much of the R&D spending and other portant activities are done elsewher says IDC analyst Carsten Hejndorf.

FUNDING NEW IDEAS. The bigger pr lem is that European economies rem too fragmented and rigid. Language cultural differences are part of the pr lem. Indeed, change tends to happ first in Britain and in countries wh English dominates, such as Scandina While Europe's labor pool is highly e cated, moreover, labor-market rigiditie many citizens simply won't move to t on new jobs—tend to offset this adv tage by making employers reluctant set up new operations or take on n workers. Transgene, a French biot company, warns it will establish its n manufacturing operations in the U.S Britain if that bind doesn't moder No wonder the Continental unemp ment rate remains stubbornly ab 11%, vs. 4.5% in the U.S.

And, as SAP's Plattner notes, Eu peans tend to be fiscally conservative July, Britain's Internet Bookshop to sell out to chain-store giant W Smith after hitting snags with a plan public offering. "There's still far m willingness in the U.S. to fund n ideas," gripes Internet Bookshop C Executive Rick Latham. Perhaps. now market and technological forces gathering in Europe that could br down even such deep-seated attitu And that's no hype.

By Thane Peterson in Frankfurt Stephen Baker in Paris

EUROPE'S TECHNOLOGY GAP

	EUROPE	U.S.
BUSINESSES WITH INTERNET ACCESS	47%	61%
HOUSEHOLDS WITH INTERNET ACCESS*	5.5%	18%
TOTAL SPENDING ON INFORMATION TECHNOLOGY	$196 BILLION	$320 BILLION
TOTAL SPENDING ON TELECOM SERVICES	$182 BILLION	$230 BILLION
HOUSEHOLDS WITH PERSONAL COMPUTERS	24%	46%

1997 data. *France, Germany, and Britain only

DATA: INTERNATIONAL DATA CORP., BUSINESS WEEK

VOICES Luc L. Soete

TITLE Director, Maastricht Economic Research Institute on Innovation, University of Maastricht. 48.

CONTRIBUTIONS Soete sees seismic economic change cor to Europe. Faster technology development has helped the Nor grow the most. **IN HIS WORDS** "Europe is following the U.S with [English-speaking] nations leading the way. That contra with Japan and Korea, where the importance of hardware and weak service sector may be contributing to the crisis."

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ASIA

WILL TECHNOLOGY LEAVE JAPAN BEHIND?

More investment in innovation will be needed to propel the economy into the future

UP-TO-DATE But on average, Japan has just 10 PCs per primary school

Perhaps in another time and another place, things would have turned out differently for Japanese Internet startups. As the market took off around 1994, entrepreneurs launched 2,000 such ventures, confident that the technology-driven forces sweeping through the American economy soon would engulf Japan. They also figured that demand for software, high-speed computer networks, and Net-related offerings would explode. And Japanese investors would continue to pump funds into Internet-services firms.

Four years later, half of those ventures have vanished. And one survivor, Joichi Ito, president of Digital Garage, a search-agent vendor, has a darker view of Japan's prospects in the Information Age. The nation's debt-soaked banks—the source of 45% of Japan's venture capital—aren't in the mood to lend to risky startups. Nor are established high-tech giants willing to nurture small firms that could become competition. With Japan caught in the grip of a recession, deep structural problems, and a long bear market, Ito has postponed plans to list his company on Tokyo's over-the-counter market. Instead, he's looking for a Silicon Valley partner to take a big equity stake. "I think a lot of Internet startups are going to look to the U.S. for cash," he says.

Digital Garage—and plenty of others—may well succeed. But that raises the question: Why do entrepreneurs such as Ito face so many obstacles when it comes to trying out new ideas? Sure, Japan is home to world-class multinationals, a highly educated workforce, and the world's biggest stash of savings. Yet it fails miserably at freeing up those resources for promising startups, providing incentives for managers to challenge old certa ties, or marshaling Japan's considera research and development spending i breakthrough products and industries. the future belongs to economies driv by innovation and knowledge, wh does that leave Japan?

The problems run deeper than t banking crisis that has grabbed he lines of late. If Japan is to regain edge, its entire economic model v need rethinking. For decades, w trained bureaucrats have funneled ca tal to export-oriented industries. worked brilliantly during Japan's po war catch-up phase. Not so in t decade—since 1992, Japan's average nual growth has barely topped 1%.

SLOW TO CHANGE. True, Japan ha world-class manufacturing sector, counting for 24% of the nation's outp vs. 13% in the U.S. Nobody can des and roll cars off assembly lines bet than Toyota Motor Corp. The major of the economy, though, doesn't nea match up. The productivity of Japa banks, brokerages, retailers, and ot services is two-thirds, on average, their counterparts in the U.S., accord to the McKinsey Global Institute.

These sectors have scarcely star the transition to the Information A where flexibility and speed matter. reason is that they tend to be hea regulated, subsidized, and protec from the forces of a cost-competit global economy. Another is that Jap consensus-leaning, top-down mana ment style is slow to embrace techn gies that would transfer decision-mak to middle managers. That's chang but not fast enough. "The fundame reason why Japan is weak in infor tion technology is because of its 19 era economic system," says Yu Noguchi, a professor at the Univer of Tokyo's Research Center for vanced Science & Technology.

Moreover, fostering startups in l ing-edge businesses has only rece become a priority in Japan. Bure crats can readily cite the latest sta tics for car production or silk-co yields. But there's precious little tr ing or promotion of the entrepreneu

Japan invests only 2% of its GDP in information technology, vs. 3% in Britain and Australia and 4% in the U.S.

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sector. Only now, with high tech fueling impressive growth in the U.S., are Japanese policymakers and economists starting to take notice.

Bureaucrats at the Ministry of International Trade & Industry (MITI), who for years have coddled the manufacturing sector, have begun drafting new policies, in hopes of spurring the creation of high-tech ventures. At the urging of Stanford University economist Masahiko Aoki, who is coaching MITI officials in his capacity as head of the Research Institute of International Trade & Industry, MITI this year scrapped regulations that ban the creation of holding companies. Aoki and MITI officials are pressing for tax revisions to enable holding companies to write off losses from money-losing ventures.

The government recently took another step in the right direction by smoothing the way for companies to offer stock options as a means of attracting talented staff. Japan had discouraged options in the past by taxing individuals on the value of their stock options even if they were unrealized paper gains. Three years ago, when Softbank Corp. chief executive officer Masayoshi Son started offering top officers such incentives, other Japanese executives scolded him for "stupidly giving employees the kind of financial incentives that would harm the nation's work spirit," he recalls with a laugh. These days, Softbank, Sony Corp., and others are sharing more wealth.

PRICEY CALLS. Despite such progress, numerous obstacles remain. One big barrier is the lack of spending on information technology in Japan—as Intel Corp.'s Andrew S. Grove and Microsoft Corp.'s William H. Gates III are quick to point out on every trip to Tokyo. Thanks to the current downturn, shipments of PCs in the fiscal year ended last Mar. 31 were down 5% from the previous year. And the high cost of telecommunications—a function of Nippon Telegraph & Telephone Corp.'s monopoly in local phone service—is discouraging greater use of the Internet. Japan invests only 2% of its gross domestic product in information technology, compared with 3% for Britain and Australia and 4% for the U.S.

Another problem is the dearth of talented entrepreneurs. Ito, who learned the ropes as a computer engineer in the U.S., is surprised at his peers' lack of skill. "The kind of people who go into venture businesses seem to be the type who can't do anything else," he says. That's not to say that Japan lacks talent. For the most part, though, gifted engineers and executives prefer to hold on to their jobs at big corporations.

VOICES Masahiko Aoki

TITLE Stanford University economist. Heads Japan's Research Institute of International Trade & Industry. 60.
CONTRIBUTIONS An observer of Silicon Valley since the '70s, Aoki has pushed MITI to open the economy to small business. One succe Allowing holding companies, a form he believes fosters innovation
IN HIS WORDS "Real change must and can occur in business organizations. The role of MITI is to facilitate this change. The role government should be complimentary and not that of a controller."

That's because although the so-called lifetime-employment system is starting to crumble, large companies still manage to retain their best and brightest with the lure of job security and high pay. In doing so, they discourage job mobility—and creativity, too, since good ideas rarely make it through large corporations' bureaucratic structures. "Many talented engineers are trapped in large companies such as Toshiba Corp. or Fujitsu Ltd.," points out Tokyo University's Noguchi. "So even if they have creativity or brilliant ideas, they won't be able to realize their talents."

While the government has taken some steps to encourage growth in the information-technology sector, it could be doing a lot more. Some critics are calling on Tokyo to abolish taxes on computers and software products corporate use to spur purchases client-server systems and new servic Despite such pleas, the Finance M istry decided to reduce from $1,400 $700 the ceiling on what businesses m deduct for each information-technolo purchase, starting this year.

ROTE LEARNING. It's obvious Japan a needs to seed innovation. The first s is to reform primary education to red the emphasis on rote learning and courage creativity—as well as the use PCs. While nearly all kids have access at least some computers, the aver elementary school offers just 10 r chines for hundreds of students. A few teachers know how to use P much less guide their pupils.

Next, the government must conti to revamp university labs to boost b research—a strategy it initiated in 19 Currently, some 80% of Japanese search and development takes place private labs, which focus on applicat not innovation. So it's no surprise t Japan trails in the race to becom sci-tech leader in the future. What ab the country's prowess in such areas semiconductors, robotics, and dig technology? "These are commodity c ponents and not a cash cow," points Kiyoshi Kuriyama, research directo Gartner Group Japan. "We're not go to create a revolution."

Yet a revolution is precisely w Japan needs. The alternative is to c high-growth industries of the futur U.S. and European rivals. Homegr software makers such as Ascii C and Justsystem Inc. have been all wiped out by Microsoft's dominanc operating-system and applications s ware. And even now, Japanese con nies are cautious about embracing information technologies that could them back in stride. If business government fail to heed the warn signs, Japan's future looks grim ind "If this situation develops into a crisis, creative individuals and succes companies will start fleeing the c try," warns Tokyo University's Nogu By then, it could be too late to catch

By Irene M. Kunii, with B Bremner, in Tokyo

WHY JAPAN IS LAGGING

STIFLED INNOVATION Japan is behind in breakthrough research that spurs growth in the information-technology sector, because 80% of R&D is centered in private labs that emphasize near-term, application-oriented work.

LOW-TECH SPENDING Japanese companies invest about 4.5% of their revenue in information technology, 50% less than U.S. companies. And only 17% of Japanese households have computers, compared with 50% in the U.S.

CREATIVITY JAM Talented engineers and managers mostly are locked into jobs at big companies where their creativity and ideas rarely surface.

FUNDING SQUEEZE The banking sector regards Internet and information-technology ventures as too risky, while large companies continue to shun small ventures for fear of competition.

BLOCKED MARKETS Suffocating regulations make it very difficult for startups to be listed on the Tokyo stock exchange or over-the-counter markets. One example: A firm must be profitable for at least a year before an IPO.

DATA: BUSINESS WEEK

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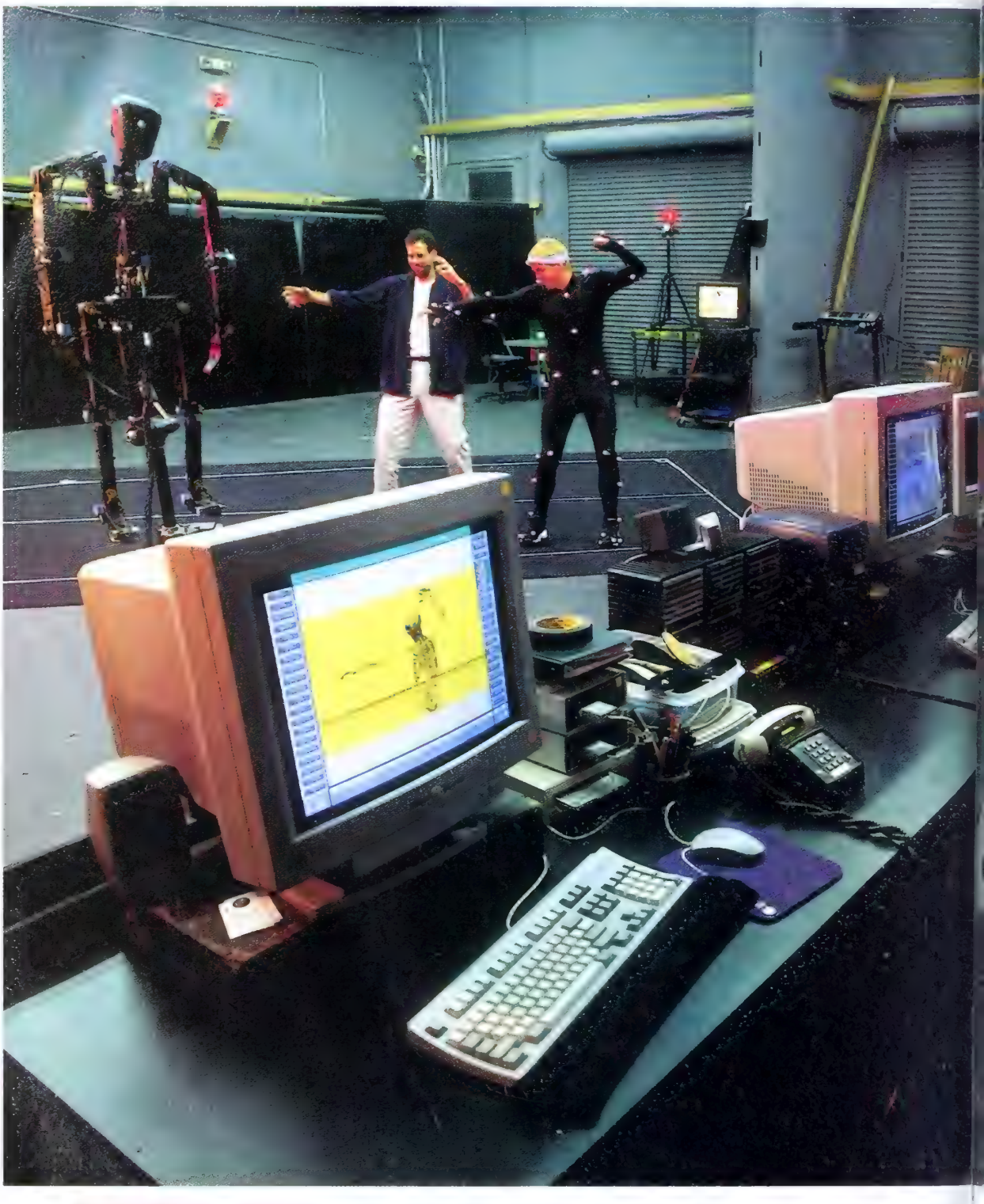


SAN RAFAEL, CALIF. **Industrial Light & Magic's Motion Capture Studio**
Human movements are recorded via reflective markers and cameras, producing data that are used to make computer-animated characters move in a lifelike fashion. It's but one of the many digital technologies that ILM has pioneered for customers in the movie, computer game, and advertising industries.

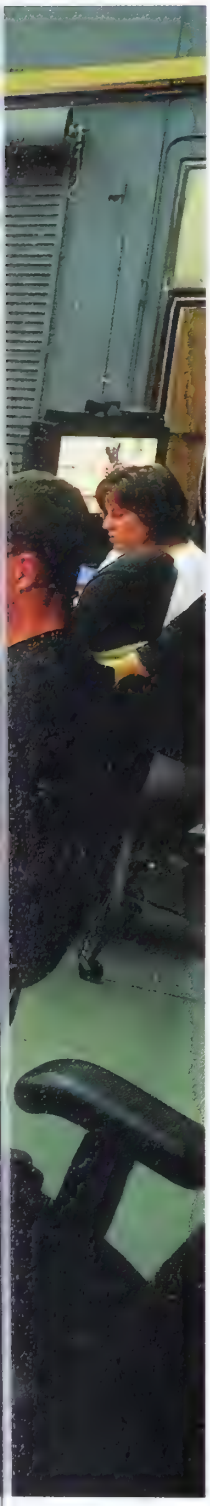


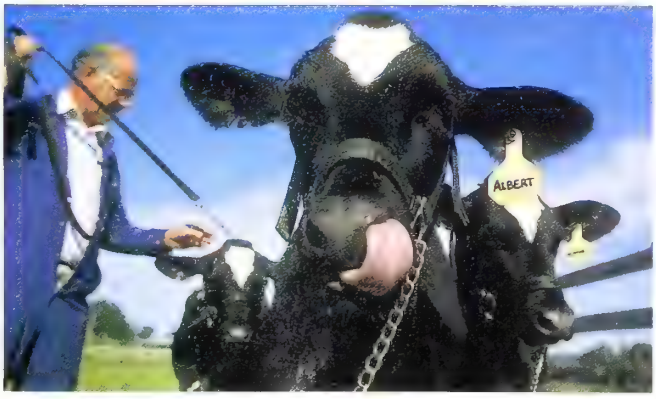
PHOTO ESSAY

GLOBAL HOT SPOTS

'We live only by the grace of invention; not merely by such invention as has already been made, but by our hope of new and as yet nonexisting inventions for the future."

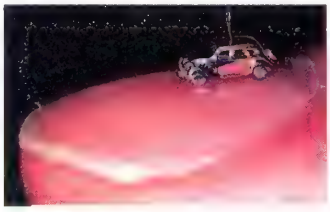
So wrote mathematician Norbert Wiener 40 years ago. As the 21st century dawns, creativity's role in the global economy has never been more central. A silicon chip can be etched anywhere in the world, and the pace of innovation is quickening. No one has a monopoly on creativity, as this portfolio shows.

HADLEY, MASS. Meet Albert, George, and Charlie, cloned by Advanced Technology Inc. Soon, clones will be so ubiquitous they won't be named. Cloning promises to yield everything from drug-producing goats to gene-altered pigs—with organs that can be transplanted into people. And the same reprogramming of genes that allows cloning could also be harnessed to devise new approaches to scourges such as cancer.

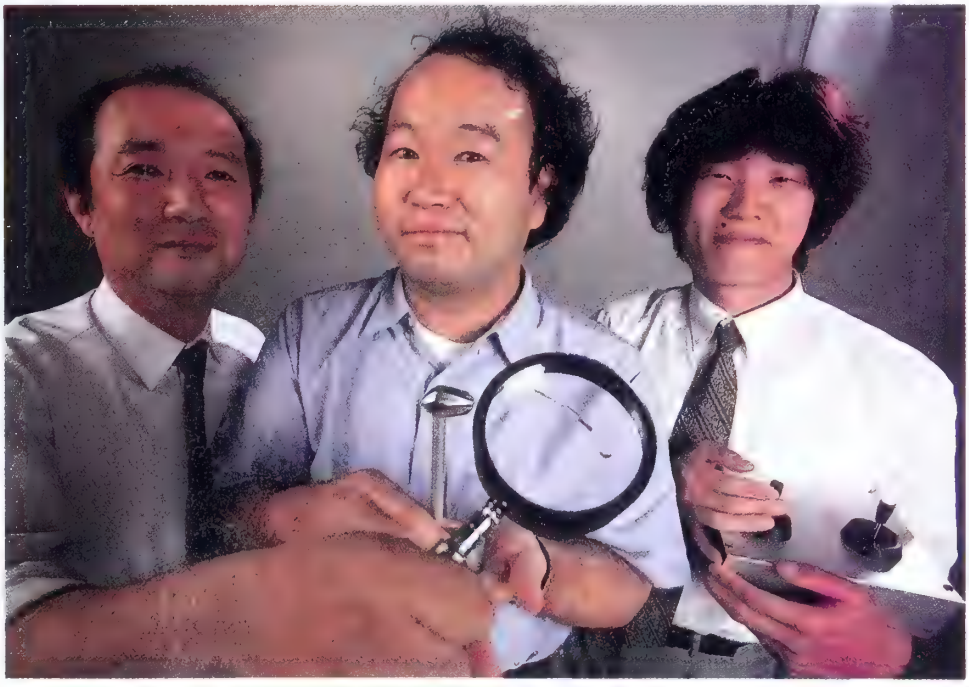


BANGALORE **The high-tech capital of India** Engineers at the Aeronautical Development Agency designed software to cut the cost and time of building composite-material aircraft wings for combat jets. And at the Indian Space Research Organization, scientists operate satellites that deliver the highest-resolution digital images of the earth now commercially available. Both the aircraft software and the satellite's images are sold outside India.

TAIPEI **Hsinchu Science Park** Managers from Excellence Optoelectronix take lunch with an American market research consultant. Hsinchu is home to dozens of high-tech companies, from giant Taiwan Semiconductor Manufacturing Co. to tiny startups. The high-tech industry, with a generous assist from the Taiwanese government in the form of tax incentives and research subsidies, has fueled Taiwan's growth.



TOKYO AND NISSHIN **Micromachines** Twenty-six companies and research institutes are integrating electronics, mechanical and optical features, and magnetic materials in a new generation of micromachines. The thin manipulator is an exploratory catheter under development at the Olympus Basic Research Institute. Already in *The Guinness Book of World Records* as the world's smallest auto is Denso Research Lab's "microcar," the size of a match head.



MUNICH Software maker Inovit Just a few years ago, seed money was scarce in Germany, and only giants such as Siemens had technological prowess. Now, upstarts such as Inovit, whose software digitizes medical images for storage, are thriving. The small team of software engineers and managers epitomize today's Silicon Bavaria. Inovit already has 20% of the German market, competes with Siemens, and expects to go public within a few years.

PRAGUE AIDS research at the Insti
Organic Chemistry & Biochemistry Scientis
Institute, strapped for funds, were using vin
equipment. Yet they managed to develop two n
for AIDS patients with help from scientists at
versity of Louvain in Belgium. One recently g
pean Union approval for sale, while the other
sold in the U. S. for two years. The global AI
market is expected to reach $5 billion by 200

CAMBRIDGE Old World high tech Britain's venerable halls of learning are spawning a new breed of scientists and investors. Today, there are about 1,200 technology companies in the Cambridge area, employing about 35,000 people engaged in everything from computer graphics to molecular genetics. At Cambridge Display Technology Ltd., a lab technician examines the company's light-emitting polymers, which eventually could replace liquid crystals in flat-panel displays.

HELSINKI Cellular phones It's no surprise to see virtual phone booths at a café in the capital of Finland, home of Nokia Corp. Offering an array of features and snazzy designs, Nokia's digital cellular phones are all the rage worldwide, popular in places even as far afield as China. The company is riding an industry growth wave. Around the world, cellular subscribers are expected to double, to 550 million, by 2001.

TEL AVIV Bioinformatics startup Compugen Founded by three members of an elite military program, Compugen uses algorithms and advanced mathematical models that analyze DNA sequences to speed up drug development. With expertise in military technology and a highly skilled immigrant workforce, Israel's $10 billion high-tech industry already has made its mark in encryption technology and microprocessor design.

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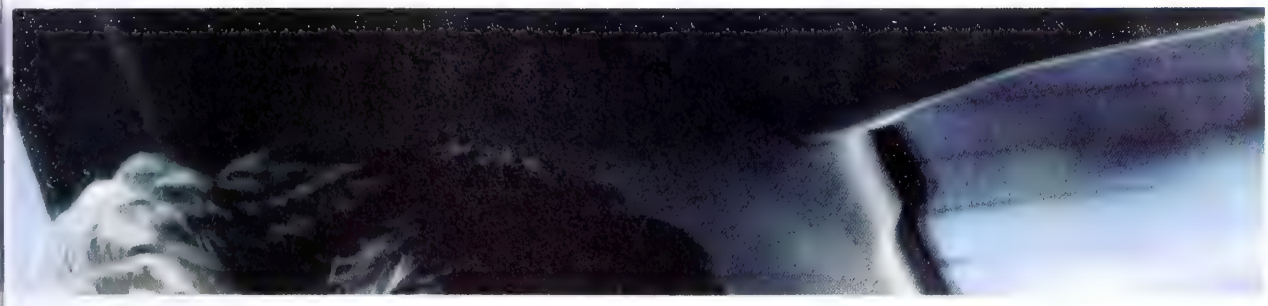

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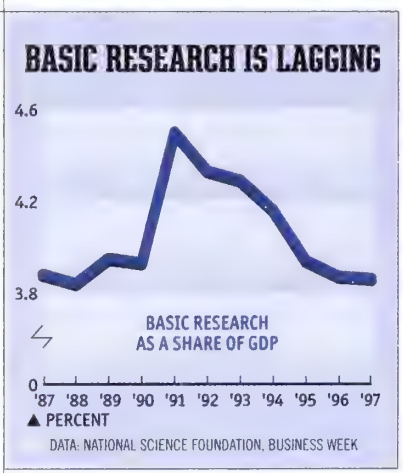
POLICY

WHY THE PACE HAS TO PICK UP

To sustain growth of at least 3% increased savings must be combined with a big jump in spending on basic research

Nobody can fault the U.S. economy's performance over the past few years. Strong growth, falling inflation, low unemployment, and a rising stock market have combined to make this the best economy in at least 30 years. Now what remains is the biggest question of all: how to keep the economy on the fast track, growing at 3% or more a year well into the 21st century. Most economists believe that the best way to increase long-term growth is to boost national savings by cutting the budget deficit or changing the tax system to discourage consumption. The benefits of encouraging savings are simple and easy to understand: Increased savings means lower interest rates, more investment in new machinery and buildings, and ultimately, a more productive economy. "It's pretty foolproof," says Martin Feldstein of Harvard University, who also heads the National Bureau of Economic Research. "Once you start building up additional savings, almost all of it will end up in investment."

But the growth payoff of a policy focused solely on increasing savings to keep the economy in high gear is small. The proudest achievement of Washington policymakers—the elimination of the federal budget deficit, which went as high as $290 billion in 1992—will add only 0.1 percentage point to the annual growth rate over the next 10 years, according to most econometric estimates. Similarly, the controversial proposal to privatize Social Security will boost savings by requiring deposits into personal retirement accounts. That, too, however, will give only a slight lift to average growth.



In the 21st Century Economy, it's innovation that w give us the growth spurt we need, not prudence and a bu get surplus. And that has always been true. All the e dence suggests that a pro-innovation policy produces high turns. Historically, investment in research and developm has yielded at least a 30% annual return to society, compar with an 8% to 10% return on investment in physical capi such as new machines. Today, the U.S.'s private and pub sectors together spend about $200 billion a year on resea and development, and that's a lot of money. But with the r of return on R&D so high compared with other investmen the country should be spending a lot more. According t 1997 paper by Charles I. Jones of Stanford University a John C. Williams of the Federal Reserve, the right level U.S. spending on R&D is "more than four times larger th actual spending."

SAVINGS OR INNOVATION? A pro-innovation economic pol would be very different than one designed to encour savings. In principle, it might seem that a country as rich the U.S. could do both at once. But in reality, they requ almost diametrically posed policies. For c savings and innovat compete for national sources, since one way to boost natio savings is to reduce federal budget defi Each billion not sp on defense or hea care, for instan means less governm borrowing, lower int est rates, and more vate-sector investm But when many ot pressing needs are ing cut back to red spending, it's hard for Congress to find more funds for R

Equally important, savings and innovation each requir very different psychology. The way to get people to s more is to encourage prudence and frugality—to instill a iety about the future. By contrast, innovation is more lik to come out of a willingness to take risks and an optim about future possibilities. It is no coincidence that Japan cautious society par excellence, with a national savings r about twice that of the U.S.—has in recent years str gled to match the innovations coming out of entrepreneu companies in the U.S.

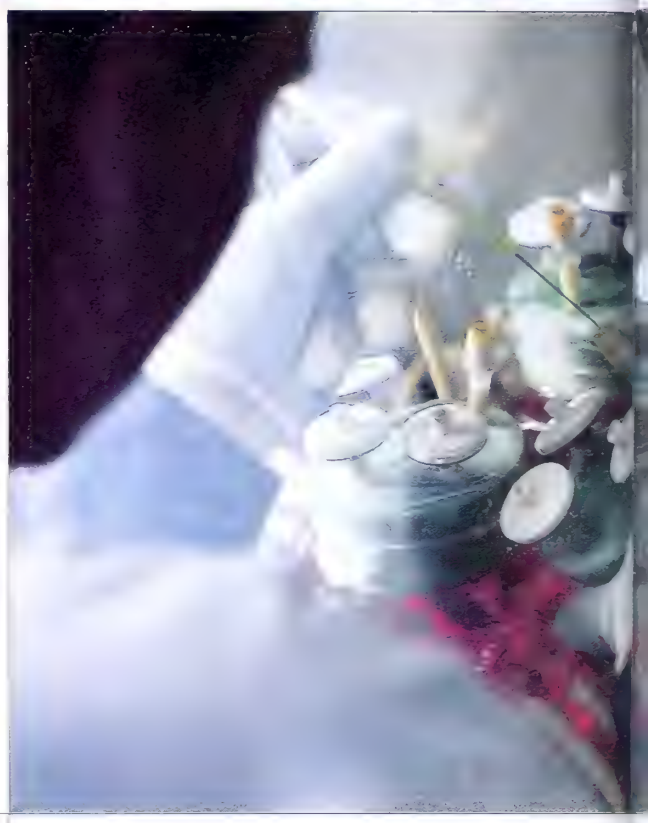
Now, to keep the economy growing, Washington pol makers need to take a step in a different direction: an

nomic policy with a top priority of encouraging innovation. In part, that means paying more attention to how federal policies can deleteriously affect the high-tech industry in such areas as regulating the Internet, visa quotas for high-tech workers, and encryption policy (page 140).

What will be more difficult is finding a good way to get more funds into basic research and graduate science education. It won't be easy. Many economists and politicians are leery of putting more taxpayer dollars into encouraging innovation, and with some good reason. During much of the postwar period, the government had a terrible track record in directing innovation. Notable—and expensive—examples include the space program, nuclear power, and the synthetic-fuels program started by President Jimmy Carter in 1979. These programs were essentially funded and directed by the government, and while some scored notable technical successes, none has produced major economic payoffs. Indeed, despite the remarkable technical achievement of landing a man on the moon, the only important economic uses of space today are satellite communications and satellite imaging. From an economic perspective, that's a comparatively small payoff from the more than $200 billion spent on space R&D since the early 1960s.

Moreover, the experience of the 1970s and 1980s has biased economists against counting on "innovation policy" as a way out of economic stagnation. During those decades, technological progress apparently added little to economic growth. That's why a savings-oriented growth policy—no matter how slow—seemed like the only game in town.

But the technological pessimism of the previous two decades was overdone. Innovation is once again driving the economy, and it will continue to do so in the future. In that kind of an economy, maintaining or boosting R&D is essential.



The drop in students pursuing science and engineering must be reversed by increasing funding for fellowships—and not tying them to specific research projects

There's a paradox, however: Studies show that an R&D dollar spent by the private sector or in academics has a much bigger payoff than research done in government-run labs. Yet left to their own devices, corporations will naturally focus on doing R&D that translates directly into profitable products. The more fundamental work of scientific discovery—the kind of research that has tremendous benefits for society as a whole—is uneconomical for individual companies, with a few rare exceptions.

RISKY BUSINESS. That's true even in high tech: Despite their explosive growth and high profits, most information-technology companies focus their R&D dollars on short-term issues, such as getting out the next generation of chips or software. Meanwhile, the critical long-term issues of the reliability and productivity of software are not receiving enough attention. "We have much less money available for the kind of high-risk research investment that really tries to intersect with the future," says Kenneth W. Kennedy, a computer-science professor at Rice University who is co-chair of the presidential advisory committee on high-performance computing.

Since 1991, private and public spending on basic research as a share of gross domestic product has fallen shar (chart, page 136). That trend needs to be reversed, espec ly since corporations are focusing their R&D funds more a more on applications related directly to their business. The first priority, therefore, is to increase funding for ba research, which provides the underlying foundation for fut technological progress.

That suggests that the government has an important rol funding long-term basic research. And historically, that where government funds have done the most good. Muc the early work on the transistor and integrated circuits w funded by the Defense Dept. Remember, too, that the Int net was initially spawned by government money. And th are hardly the only examples. "The things funded 10 to years ago produced a large portion of the stream of ideas t created the current generation of technology," says Kenne

Moreover, government-funded basic research has a mu plier effect by spurring additional funding by the priv

A PRO-INNOVATION GROWTH POLICY:

- ▶ Continued support for free trade, which provides the globa markets needed to sustain new products
- ▶ A permissive attitude toward immigration, which brings in needed skills
- ▶ Increasing deregulation of financial markets, to allow capit to flow to the most innovative sectors
- ▶ Stepped-up federal support for basic research in universiti and corporations across a wide range of disciplines
- ▶ Increased support for graduate education in the natural sciences, computing, and engineering
- ▶ Careful attention to regulating new services, such as the Internet, in a way that promotes growth

DATA: BUSINESS WEEK

LOPSIDED Biotech studies at MIT: Outside of defense and space, half of federal R&D focuses on health. More funds must be found for other areas

sector. According to a June, 1998, report by the generally skeptical Congressional Budget Office, "federally sponsored science, particularly that conducted in academia, does indeed play a 'bird dog' role in the economy." Corporations use the basic research conducted by academics as a guide to the profitable areas to explore. "Most of the exciting work is done at universities," says Nathan Myhrvold, chief technology officer at Microsoft Corp.

But not every dollar has an equal impact. For one thing, a portion of the money now going to government-run national laboratories each year should be gradually shifted to the private sector, where it will ›ly have a bigger payoff—or the labs should be re- l to devote more resources to solving business and in- al problems. Equally important, the government agencies rge of handing out funds, such as the National Science ation and the National Institutes of Health, should resist mptation to pick winners and losers. Or even trying to which areas are going to have the biggest payoff should ow-level priority. Instead, government agencies should ıtrate on nurturing a diversified portfolio of research in a wide range of areas, from cutting-edge biotech to nundane areas as construction.

ht now, government funding is not diversified enough. ıe of defense and space, about half federal R&D dollars are spent on -related research. While that focus ›lped produce the biotech revolu- here are key areas that are un- ıded. The point is not to cut back ılth-related research but to add to her areas.

›sting basic research is only part at's needed, however. The other l area that must be beefed up is pply of trained scientists and engineers. Surprisingly, age of innovation, there are signs that the education- tem has not kept up with the growing needs of the ny. "We're hurting badly, worldwide, for knowledge rs to support the industry," observes Richard M. Levy, ıan of the American Electronics Assn. and executive resident of Varian Associates Inc.

sag in science education must be reversed. At a vhen businesses are gasping for skilled workers, en- nt in science and engineering programs—especially at aduate level—has been dropping. That suggests that vernment should boost funding for graduate students ical technological fields. "Technology doesn't just fall from the heavens like the rain," says Alan S. Blinder, the Princeton University economist who has served on President Clinton's Council of Economics Advisors and as vice-chairman of the Federal Reserve. "If you're serious about accelerating growth, the two levers are human-capital formation and R&D."

Part of the problem is that there are too many other opportunities for college grads to make money. For example, 10 years ago, colleges were graduating about 40,000 computer-science majors per year. Now that number is down to 25,000. Total enrollment in graduate science and engineering programs has dropped for three years in a row, as high pay for high-tech workers makes it more appealing to get a job instead of going to graduate school. In the short run, that's the right thing to do, but it's the equivalent of eating your seed corn: It reduces the number of people working on the basic research needed for years hence.

What should be done? More fellowship dollars must be found to encourage students to pursue engineering and the sciences. Moreover, the money for graduate students should not be tied to particular research projects, because that makes it hard for graduate students to adjust to changes in a hot field. "If you put the money into the hands of the bright young people, they will respond to private-sector opportunities," says Paul Romer of Stanford University.

OPEN SYSTEM. Maintaining a healthy private sector is crucial. In fact, one of the top priorities for the U.S. is to sustain its current open financial system, which can quickly shift resources to innovative sectors. Venture capital, initial public offerings, and junk bonds enable new ideas to get funded relatively easily, while lagging companies are punished by being taken over or bought out. By contrast, the Japanese financial system can provide companies with very cheap capital through its interlocking networks of banks and corporate ties. The trade-off is an enormous amount of rigidity and inflexibility. "The strategies that Japan and other countries use to reduce the cost of capital are inimical to innovation," says Romer.

Similarly, a commitment to free trade and relatively open immigration is an essential part of a pro-innovation policy. The pressure from foreign competitors forces U.S. companies to look for new and better ways of doing things. And skilled immigrants have fueled America's high-tech surge.

VOICES **Paul Romer**

TITLE Professor of economics, Stanford University. 42.
CONTRIBUTIONS As creator of "new growth theory," Romer has revolutionized the way economists think about growth. Rising living standards, he argues, depend more on encouraging innovation than on the accumulation of physical capital. **IN HIS WORDS** "We should be trying to increase the number of people involved in activities designed to generate new ideas. That is where the government can be quite powerful."

From this perspective, Washington policymakers can justifiably take credit for a decade of very good economic policy that helped lay the groundwork for the innovative surge of the 1990s. Despite heated criticism from both the left and the right, two free-trade agreements, the North American Free Trade Agreement and the General Agreement on Tariffs & Trade, were approved by a Democratic and Republican Congress, respectively, and signed by a Democratic President.

Policy, by itself, can guarantee a new age of innovation. And just as a seed grows better in the right soil, forward-looking policies create a better environment in which bright ideas can flourish.

By Michael J. Mandel in New York

AWKWARD DANCE Techies and pols at a Technology Network pa

POLITICS

A CRASH COURSE FOR CONGRESS

Lawmakers plunge into high-tech issues and shatter some old political alliances

They make unlikely dance partners indeed. Arrayed on one side of Washington's legislative ballroom are the brainy and impatient yet insular entrepreneurs of America's high-technology corridors. Eyeing them nervously are the congenitally cautious, technologically challenged, legalese-spouting politicians who call the tunes on Capitol Hill.

Slowly, awkwardly, and with much squashing of toes, Silicon Valley techies and Washington pols are learning to do the box step. Their uneasy embrace is born of necessity. The defining issues of the Industrial Age—the rise of trusts, the battle to end child labor and codify workers' rights, the regulatory protections spawned by the consumer movement—have faded. In their place: a new set of challenges that reflect the Information Age. Crotchety lawmakers who still think that automated floor voting is an electronic marvel are being forced to grapple with issues such as Microsoft Corp.'s market dominance, data encryption, V-chips, online privacy, and Internet taxes.

Add to the mix debate over trade expansion, immigration, and research funding, and "this is not your grandfather's economy anymore," says Republican pollster Kellyanne Fitzpatrick. "Members of Congress are being asked to make decisions on issues that have not been on their radar screen politically." The new calculus will grow more complex as the nation moves further into the 21st century, when new developments in biotechnology, telecommunications, and finance will begin to demand government scrutiny.

For old-school pols such as Senate Judiciary Committee Chairman Orrin G. Hat (R-Utah) or House Commerce Comm tee Chairman Thomas J. Bliley Jr. (Va.), there's no easy guidebook to t new world. Conversely, it's hardly s prising, given the rapidly shifting c rents, that many technology executiv feel the political waters in Washing are especially hard to negotiate.

"OLD VS. NEW." For one thing, tra tional partisan and ideological lab don't always apply so neatly anymo There is, for instance, no consen Democratic position on encryption. A Republicans are all over the lot whether to increase the number of v available to foreign high-tech worker key industry priority. On many issu indeed, liberals and conservatives working hand in hand—on both si of the debate. "Left and right, they've been defined, are now de says Jeffrey A. Eisenach, president the Progress & Freedom Foundati a conservative think tank. Adds Wh House aide Paul E. Begala: "Turn the-century politics will be marked b debate of old vs. new, not left vs. rig

Ultimately, neither party is a c fortable home for libertarian-leaning trepreneurs. Despite Vice-President Gore's nonstop courtship of Silicon

NEW DAY CONGRESS IS WRESTLING WITH HOW—IF AT ALL—TO REGULATE THE ONLINE WORLD. ALREADY THIS YEAR, MOR THAN 150 INTERNET-RELATED BILLS HAVE BEEN INTRODUCED, UP FROM 24 LAST YEAR

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ley, tech execs and their highly mobile, educated workers are turned off by the Democratic Party's historical tendency to tax and regulate. But they're also troubled by the Republicans' moral agenda, which seeks to tightly police social behavior.

Certainly, that hasn't stopped both parties from making frequent forays to Silicon Valley. "Clinton and Gore hit the ground running faster, but the Republicans have caught up," says Daniel S. Scheinmann, general counsel for Cisco Systems Inc. When it comes to reeling in the techies, "there will be raging competition for at least the next decade between the parties," predicts T. Wade Randlett, Democratic adviser to Technology Network, a bipartisan high-tech political action committee. "The fundamental ethos of Silicon Valley is that it's pro-free-market, pro-enterprise, pro-social-tolerance. Whichever party does the best job of embracing that centrist message will win."

UP-AND-COMERS. As they absorb that lesson, politicians also are learning that being perceived as "pro-business" no longer means what it once did. In the old manufacturing economy, labor-management tussles often defined Corporate America's view of friendly or unfriendly politicians. Now, management is consumed by a wide range of international issues, an outgrowth of the increasingly global marketplace. And in today's less unionized workplace, top priorities are quality child care, health benefits, and portable pensions. "In the 1950s, blue-collar workers argued over the Taft-Hartley Act [the 1947 law that banned secondary boycotts]. Today, mothers in high-tech companies argue about day care," says Senator Robert G. Torricelli (D-N.J.).

The emergence of a new order has created a constellation of up-and-coming political stars. While Gore has practically made himself a fixture in Silicon Valley and on Massachusetts' Route 128, other Democrats are working closely with the high-tech community. Among the standouts: moderate California Representatives Calvin M. Dooley, Ellen O. Tauscher, and Anna G. Eshoo. GOP techno-stars include Michigan Senator Spencer Abraham and Representatives Christopher Cox and Tom Campbell of California, Robert W. Goodlatte of Virginia, W. J. ("Billy") Tauzin of Louisiana, and Rick White of Washington.

All of these lawmakers, who talk re... ularly with high-tech execs, have prov... to be quick studies at information tec... nologies, and they're backed up ... staffers who know even more. The... mostly moderate alliances, such as t... New Democrat Coalition and the R... publican Main Street Partnership, a... becoming their parties' technology-sav... interpreters of trends in emerging ... dustries. "These issues are arcane ... members, so we pl... the role of educator," says Dooley, co-ch... of the New Democ... Coalition.

CONSENSUS. The ce... trists are trying ... build a consensus ... two defining issues ... the new generati... They're pushing ... environmental ag... da, for example, t... eschews direct g... ernment edicts in ... change for results-... ented action ... corporations. A... they're focusing ... business-governm... partnerships to p... vide students w... computers and ot... tech tools so they ... train for the jobs ... the future. Moderat... also want to w... with business to h... displaced workers ... train to compete ... the rapidly shift... job markets. "... have to be consci... of folks who d... think they're going ... make it and ensure that companies h... incentives to help them retrain," s... Tauscher, a former Wall Street st... trader and investment banker.

On many other emerging issues, ... hoc coalitions uniting the left and ... right are more common. Cox, a lead... House conservative, is working with ... eral Democratic Senator Ron Wyde...

E-commerce, encryption, and other high-tech flash points are making for some truly strange political bedfellows

THE EMERGING POLITICAL CALCULUS

TECHNO-REPUBLICANS
A new breed of GOP legislator has emerged to advocate for high-tech causes, from immigration liberalization to securities litigation reform. These younger politicos, including **California Representative Tom Campbell,** are comfortable with technology and politically savvy.

DEMOCRATIC MODERATES
On Capitol Hill, they're called the "Blue Dogs." These pro-business centrists, among them **Representative Ellen Tauscher of California,** believe in limited government and are willing to work across party lines to seek consensus on cutting-edge economic issues.

NEW INTERNATIONALISTS
Farm-state Republicans such as **Montana Senator Conrad Burns** are becoming a key source of support on trade and commerce. While socially conservative, they resist pressure from the Religious Right to tie trade liberalization to abortion and religious persecution.

NEW ECONOMY DEMOCRATS
In the old political model, they were liberal Democrats. But with labor-management issues waning in importance, lawmakers such as **Texas Representative Lloyd Doggett** find themselves allied with business interests on many trade and technology issues.

on to pass a moratorium on new s on Internet access and commerce. opponents at times have included of the nation's Republican gover- who see E-commerce as a huge of tax revenue and fear losses in state sales-tax bases. Meanwhile, ure to make Internet service avail- to rural communities is uniting such ge bedfellows as conservative Alas- enator Ted Stevens and liberal cratic Representative John D. Din- f Michigan.

nother odd alliance is shaping up e debate over encryption. The Clin- Administration, backed by law en- ment, wants to ban the export of sticated code-scrambling software s the government is provided with to break the codes. The proposal trong backing from conservative blicans, including Representative G. Oxley (R-Ohio), a former FBI t, and law-and-order Democrats as Senator Dianne Feinstein (D-). The unlikely coalition opposed e ban includes the software indus- he liberal American Civil Liber- Union, and antigovernment social rvatives led by Eagle Forum Pres- Phyllis Schlafly. "It's an era where ave floating majorities," says Dem- ic Leadership Council President Al . "You can't depend on a coalition g blocs sticking together on issues atter what."

e new era coalitions, and their al- n business, don't always get what want. High-tech execs have been l, for example, to see support for trade weakening in both parties. Democrats worry that globaliza- is costing America jobs and de- ing wages, and similar protectionist ment is bubbling up on the pop- flanks of the Republican Party. wise, the normally tech-friendly n Administration is resisting Sili- alley's pleas to lift the cap on visas reign high-tech workers. The rea- pressure from unions in an elec- ear.

EN EGGS. Asia is a critical market echnology-based industries. But exporters are waging an uphill to persuade House Republicans to ve an additional $18 billion for the d-out International Monetary . Business views the fund trans- as critical to the revival of Asia's ing economies. Yet in the current te, "there's absolutely no political in defending internationalism," former Maine Governor John R. rnan Jr., head of the Republican Street Partnership.

wmakers and the White House are wrestling, as well, with how—if at all—to regulate the new industries that have driven much of the nation's recent economic growth. On one hand, more than 150 pieces of Internet-related legislation have been introduced in Congress in the current term, up from 24 a year ago. Yet although Microsoft Corp. and Intel Corp. are enmeshed in legal battles with antitrust enforcers, technology titans mostly have eluded the congressional impulse to regulate.

One reason: Neither party wants to be responsible for killing the goose that is laying the economy's golden eggs. And the Information Age is evolving so rapidly that lawmakers aren't sure how to be either timely or relevant. "It's too hot for them to handle," says Jerry J. Jasinowski, president of the National Association of Manufacturers. "Government understanding of economic and technological developments substantially lags behind what is actually going on in the market."

Corporate officials want the government to stay out of their product-development and merger plans. But the American public is ambivalent. While 54% say the success of new industries grows out of their "relative unrestricted state," according to a poll by Fitzpatrick, a majority say high tech requires at least some regulation. "Folks recognize that there should be some sort of oversight at the federal level," says Fitzpatrick. "The no-regulation stance is not going to play."

SHIFTING ALLIANCES. Even high tech's biggest boosters concede that as technology, trade, and immigration issues flood into Congress for consideration, more federal oversight is inevitable. "So far, the friends of technology have been winning the battle," says Representative Cox. "But as time wears on, the Internet will attract its share of good and bad legislative proposals."

To prepare for that day, tech companies are hiring Washington lobbyists, forming industry coalitions, and making more frequent forays to plead their case in congressional hearing rooms. Their abiding hope: that Capitol Hill politicians at least will look and listen before leaping to impose some structure on the great, formless techno-beast. Intelligent, effective oversight will require considered judgment—and, no less, some understanding of the arcane aspects of chip design, genetic engineering, and Internet domains.

As the nation edges into the next century, the government's task will become even more complex. Political alignments will continue to shift, blurring further the familiar, more predictable landscape. All major economic transformations are wrenching experiences that bring their share of social and political dislocation. In the Information Age, too, hidebound Washington will struggle to cope with the upheaval.

By Richard S. Dunham and Amy Borrus in Washington

AL GORE'S VISION

THE INTERNET The White House's technogeek, Gore was the first Washington pol to regularly visit Silicon Valley. Credited by some with coining the phrase "Information Superhighway," Gore would bar taxation of electronic commerce while finding funds for a faster Internet.

RESEARCH He's pushing tax incentives to encourage corporate research and development. Another pet idea: The Commerce Dept.'s Advanced Technology Project, which provides government support to private research not yet commercially viable in the private sector.

RETOOLING The Vice-President talks of using new technologies to make old-line manufacturers more productive and globally competitive. He favors job retraining and lifetime learning programs and supports incentives for private enterprise to invest in inner cities and rural communities.

TRADE Ever since his pivotal NAFTA debate with Ross Perot, Gore has been a leading Administration spokesman for trade expansion. As co-chair of bilateral economic commissions with four nations, including Russia and South Africa, he's working to build the economies of potentially huge export markets.

DATA: BUSINESS WEEK

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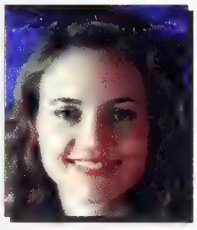

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SUMMING UP

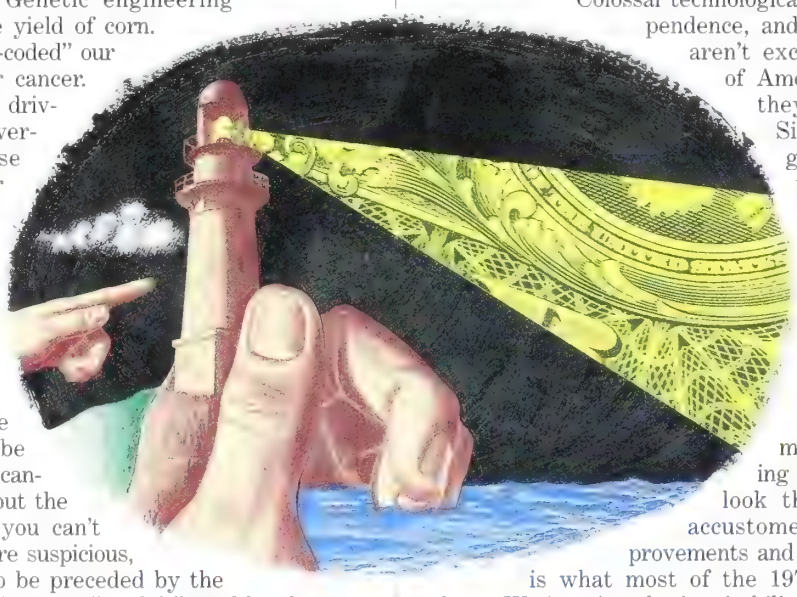
THE OPTIMISTS HAVE IT RIGHT

Sure, the 21st Century Economy gets a lot of hype. But breaking technological boundaries and sustaining high growth have been the rule throughout America's histor

Once upon a time, Paul Cullen was a plumber, till he got tired of coming home with gunk on his hands. "I wanted to do something with my brain," he says. So off he went to community college, where new skills awaited. Two years later, he was a technical-support rep, working the kinks out of complex computer networks in Seattle.

This may be the feature of the 21st century economy that's easiest to fathom: The guy who unclogged your toilet now tends your local-area network. It's other changes that may take some getting used to.

To review: Tiny things called nanotubes, built atom by atom, someday will produce striking materials and self-replicating semiconductors. Genetic engineering somehow will double the yield of corn. Drugmakers, having "bar-coded" our DNA, will find a cure for cancer. And financial innovations, driven by unimaginably powerful computers, will parse risk into ever smaller bits. Soon, you may be able to buy an option that pays off if your home price doesn't keep up with the Joneses'.



There are vexing commonalities here. First, you can't see most of this stuff. O. K., maybe you'll turn up a nanotube with something called a scanning probe microscope—but the probe itself is so small you can't see that, either. Even more suspicious, these phenomena tend to be preceded by the words "radical" and "revolutionary" and followed by the phrase "new paradigm."

Then there's the conclusion. Revolutionary (that word!) technologies and rapid globalization will create a new paradigm (see?) for the economy. They will send productivity soaring, allowing faster growth with low inflation and modest unemployment. This dynamic could last for decades, bringing unimagined prosperity worldwide.

Uh-huh. Understandably, there's an urge to dismiss the whole notion. Many intelligent people do, in fact—respected economics gurus such as Paul Krugman and Robert M. Solow, the tw towers of the Massachusetts Institute of Technology, view the gument as extravagant optimism born of hopeless naivete. F Chairman Alan Greenspan bought in only recently—and th only up to a point.

Here's the thing, though. So far, the numbers suggest i for real. Gross domestic product keeps growing faster th anyone expects. Inflation is almost negligible. Unemplo ment, stuck below 5%, recalls the palmiest days of the called American Century. Incomes are up and the poor a gaining. Life is pretty good all around.

Here's another thing—and it's really the more importa Colossal technological bounds, global inter pendence, and sustained high grow aren't exceptional. Through m of America's economic histo they've proved the ru Since the 1890s, we gone from one bre through to the next—t telephone, railroad, tomobile, semiconduc Internet. Iced lat Each quantum leap l kicked up growth right—maybe not latte) and raised liv standards.

Mired as we are more recent, less inter ing history, it's easy to ov look this past. We've gro accustomed to incremental provements and measured change, wh is what most of the 1970s and 1980s were about. We imagine the inevitability of inflation and glu mouth the rich-get-richer, poor-get-poorer mantra.

It comes down to this, then. Were those 20-odd years anomaly or indicative of some greater, bleaker truth? Has the really cool stuff been done already? Or is technolog and economic progress naturally defined by startling, dazz leaps—bursts of brilliance that reflect humanity's imagina capacity? Are we on the cusp of such dazzlement now?

As you might guess, we side with the leaps. And we th we're starting to get there. The change, wild and cacophon won't always be painless: Radical transformations create location along with bounty. The highs will be higher, but lows could be brutal. Asia's craziness, the recent stock mar get the picture? But ultimately, we're likely to be just This vision of the 21st Century Economy certainly is o mistic—but not extravagantly or naively so. The chan are real, they're coming, and they're going to be a lot of At least, most of the time.

By Keith H. Hammonds in New Y

From the telephone to railroads and semiconductors, each leap has kicked up growth and raised living standards

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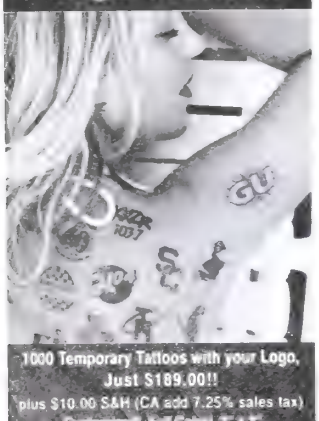

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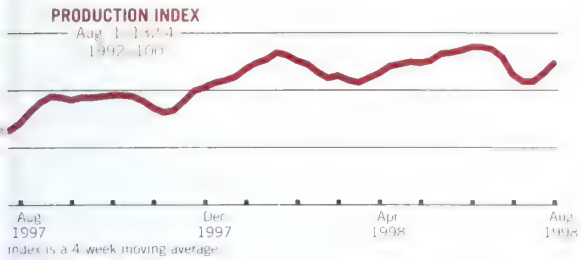
usiness Week Index

DUCTION INDEX

ange from last week: 0.7%
ange from last year: 4.1%



index is a 4-week moving average

oduction index moved up in the week ended Aug. 1, while the unaveraged ell 0.7% to 132.7, from 133.6. For the month of July, the index dropped off 0.9% from June's figure of 132.9. After seasonal adjustment, steel al output increased as did rail-freight traffic. The Association of American ds attributes the increase in coal traffic to the record hot summer weather. tion levels of autos, trucks, electricity, oil, and lumber all were down.

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DING INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
PRICES (8/7) S&P 500	1089.45	1120.67	16.7
RATE BOND YIELD, Aaa (8/7)	6.52%	6.59%	-10.6
SUPPLY, M2 (7/27) billions	$4,213.4	$4,208.9r	7.3
L CLAIMS, UNEMPLOYMENT (7/31) thous.	307	301r	0.7
GAGE APPLICATIONS, PURCHASE (8/7)	254.7	257.2	15.5
GAGE APPLICATIONS, REFINANCE (8/7)	1,291.9	1,278.8	79.7

s: Standard & Poor's, Moody's, Federal Reserve, Labor Dept., Mortgage . Assn. (Index: March 16, 1990=100)

REST RATES

	LATEST WEEK	WEEK AGO	YEAR AGO
AL FUNDS (8/11)	5.47%	5.54%	5.50%
ERCIAL PAPER (8/11) 3-month	5.49	5.51	5.57
FICATES OF DEPOSIT (8/12) 3-month	5.58	5.59	5.57
MORTGAGE (8/6) 30-year	7.04	7.05	7.60
TABLE MORTGAGE (8/6) one-year	5.78	5.79	5.69
(8/6)	8.50	8.50	8.50

s: Federal Reserve, HSH Associates, Bloomberg Financial Markets

PRODUCTION INDICATORS

	LATEST WEEK	WEEK AGO	YEARLY % CHG
STEEL (8/8) thous. of net tons	2,061	2,066#	4.0
AUTOS (8/8) units	113,607	79,666r#	-5.1
TRUCKS (8/8) units	117,168	84,901r#	6.6
ELECTRIC POWER (8/8) millions of kilowatt-hrs.	75,425	76,391#	5.0
CRUDE-OIL REFINING (8/8) thous. of bbl./day	15,247	15,431#	3.8
COAL (8/1) thous. of net tons	21,223#	21,373	7.6
LUMBER (8/1) millions of ft.	505.0#	508.0	0.3
RAIL FREIGHT (8/1) billions of ton-miles	26.1#	25.8	2.4

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., WWPA1, SFPA2, Association of American Railroads

PRICES

	LATEST WEEK	WEEK AGO	YEARLY % CHG
GOLD (8/12) $/troy oz.	285.050	287.900	-12.6
STEEL SCRAP (8/11) #1 heavy, $/ton	120.50	130.50	-17.7
COPPER (8/6) ¢/lb.	77.5	81.4	-29.6
ALUMINUM (8/6) ¢/lb	63.5	66.3	-23.3
COTTON (8/8) strict low middling 1-1/16 in., ¢/lb	70.41	71.01	-2.8
OIL (8/11) $/bbl.	12.59	13.52	-36.6
CRB FOODSTUFFS (8/11) 1967=100	225.43	224.04	-5.3
CRB RAW INDUSTRIALS (8/11) 1967=100	291.23	294.44	-14.8

Sources: London Wednesday final setting, Chicago market, *Metals Week*, Memphis market, NYMEX, Commodity Research Bureau

FOREIGN EXCHANGE

	LATEST WEEK	WEEK AGO	YEAR AGO
JAPANESE YEN (8/12)	145.87	144.06	115.65
GERMAN MARK (8/12)	1.78	1.77	1.83
BRITISH POUND (8/12)	1.63	1.64	1.58
FRENCH FRANC (8/12)	5.95	5.94	6.19
ITALIAN LIRA (8/12)	1751.5	1747.0	1794.9
CANADIAN DOLLAR (8/12)	1.51	1.51	1.39
MEXICAN PESO (8/12)	9.172	9.010	7.775
TRADE-WEIGHTED DOLLAR INDEX (8/12)	115.4	114.8	106.3

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound in dollars. Trade-weighted dollar via J.P. Morgan.

ata in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense nt. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

THE WEEK AHEAD

MEETING

y, Aug. 18 ▶ The Federal Reserve Federal Open Market Committee et to set monetary policy for the next ks. No economist among those sur- y Standard & Poor's MMS, a unit of Graw-Hill Companies, expects a in short-term interest rates. The rget for the federal funds rate has 5% since March, 1997.

MER PRICE INDEX

y, Aug. 18, 8:30 a.m. EDT ▶ Con- prices likely increased 0.2% in July, e S&P MMS median forecast, after ris- % in June. The pattern is the same es excluding food and energy items: Core prices probably rose 0.2% in July, following a 0.1% gain in June.

INTERNATIONAL TRADE

Tuesday, Aug. 18, 8:30 a.m. EDT ▶ The foreign trade deficit for goods and services was probably little changed in June from May's record high of $15.7 billion. The S&P MMS economists expect that exports, which have fallen in five of the last seven months, rebounded slightly, while imports, up 0.5% in May, continued to expand.

HOUSING STARTS

Wednesday, Aug. 19, 8:30 a.m. EDT ▶ Housing starts probably fell back to an annual rate of 1.59 million in July, after surging 5.6% in June, to a 1.61 million pace. Even with the expected decline, starts would be some 9% higher than their level of a year ago. Homebuilding remains one of the strongest sectors of the economy, buoyed by healthy consumer finances, skimpy housing inventories, and low mortgage rates.

FEDERAL BUDGET

Friday, Aug. 21, 2 p.m. EDT ▶ The U. S. Treasury is likely to announce a budget deficit of $22 billion in July, forecasts the S&P MMS survey. That would be less than the $25.6 billion recorded in July, 1997. Washington's budget is expected to be firmly in the black when the fiscal year ends on Sept. 30.

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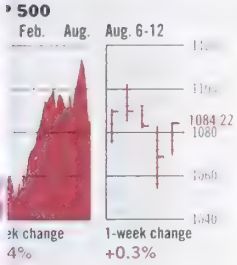


MENTARY

isettling week in the fi-al markets, which con-l to reverberate to the travails. After small on Aug. 6 and 7, the arkets plummeted again g. 11. The Dow Jones in-al average fell 112 , or 1.3%, and the S&P ustained a similar drop, ders continued to worry the Asian economic . But the biggest decline ustained by the NASDAQ osite, which plunged as high-tech companies mild recovery took place g. 12.

U.S. MARKETS	Latest	% change Week	Year
Dow Jones Industrials	8553.0	0.1	6.6
NASDAQ Combined Composite	1825.5	2.1	12.1
S&P MidCap 400	335.1	1.8	6.5
S&P SmallCap 600	173.2	3.1	–0.6
S&P SuperComposite 1500	229.6	0.5	13.9

SECTORS	Latest	% change Week	Year
Bloomberg Information Age	355.2	1.2	16.9
S&P Financials	126.6	–2.4	17.0
S&P Utilities	236.2	2.5	18.6
PSE Technology	344.0	2.7	1.6

FOREIGN MARKETS	Latest	% change Week	Year
London (FT-SE 100)	5462.2	–3.0	10.2
Frankfurt (DAX)	5402.4	–4.1	27.9
Tokyo (NIKKEI 225)	15,379.0	–3.8	–20.1
Hong Kong (Hang Seng)	6859.5	–8.1	–56.7
Toronto (TSE 300)	6495.4	–3.5	–4.1
Mexico City (IPC)	3561.5	–12.2	–30.5

FUNDAMENTALS	Latest	Week ago	Year ago
S&P 500 Dividend Yield	1.47%	1.46%	1.62%
S&P 500 P/E Ratio (Last 12 mos.)	25.6	26.6	23.3
S&P 500 P/E Ratio (Next 12 mos.)*	20.5	20.5	18.6
First Call Earnings Revision*	–2.72%	–2.64%	–1.20%

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 200-day average	1049.2	1046.1	Positive
Stocks above 200-day average	26.0%	28.0%	Positive
Options: Put/call ratio	0.62	0.55	Neutral
Insiders: Vickers Sell/buy ratio	1.28	1.46	Positive

Data: Bloomberg Financial Markets; *First Call Corp.

BEST-PERFORMING GROUPS	Last month %		Last 12 months %
Photography/Imaging	7.2	Specialty Appar. Retailers	88.5
Semiconductors	7.2	Broadcasting	75.2
Tobacco	4.2	Automobiles	59.5
Computer Systems	3.7	Drug Chains	59.4
Communications Equip.	2.8	Genl. Merchandise Chains	59.0

WORST-PERFORMING GROUPS	Last month %		Last 12 months %
HMOs	–45.7	Metals	–51.5
Oil & Gas Drilling	–23.2	Oil & Gas Drilling	–51.2
Shoes	–21.9	Engineering & Constr.	–43.2
Oil-Well Equip. & Svcs.	–21.3	Gold Mining	–41.8
Engineering & Constr.	–17.8	Shoes	–37.5

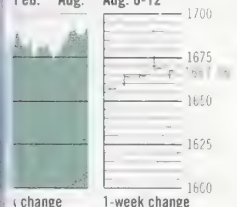
BLOOMBERG MONEY FLOW ANALYSIS

Rebound ahead? Stocks with most significant buying on price weakness	Price	1-month change
America Online	107 1/8	–11 3/4
Citicorp	144 3/4	–29 1/2
Lucent Technologies	88 7/16	– 15/16
Merrill Lynch	86 1/2	–21 7/16
R.P. Scherer	90 5/8	–1 1/8
Pfizer	103 15/16	–14 3/4

Decline ahead? Stocks with most significant selling on price strength	Price	1-month change
Cisco Systems	98	3 3/4
Dell Computer	106 1/4	1/16
Compaq Computer	33 7/8	1 1/4
Applied Materials	32 7/8	4 5/16
American Home Products	50 3/8	1 1/8
Johnson & Johnson	74	2 3/16

REST RATES

ASURY BOND INDEX



oomberg Financial Markets

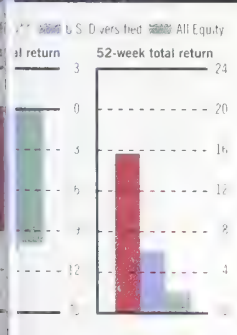
KEY RATES	Latest week%	Week ago%	Year ago%
MONEY MARKET FUNDS	5.10	5.11	5.16
90-DAY TREASURY BILLS	4.99	5.07	5.23
6-MONTH BANK CDS	5.07	5.06	5.17
1-YEAR TREASURY BILLS	5.19	5.28	5.51
10-YEAR TREASURY NOTES	5.38	5.44	6.24
30-YEAR TREASURY BONDS	5.61	5.66	6.54
LONG-TERM AA INDUSTRIALS	6.30	6.34	7.05
LONG-TERM BBB INDUSTRIALS	6.82	6.83	7.41
LONG-TERM AA TELEPHONES	6.60	6.65	7.33

BLOOMBERG MUNI YIELD EQUIVALENTS

Taxable equivalent yields on AAA-rated, tax-exempt municipal bonds, assuming a 31% federal tax rate.

	10-yr. bond		30-yr. bond	
	Latest week	Last week	Latest week	Last week
GENERAL OBLIGATIONS	4.39%	4.41%	4.93%	4.95%
PERCENT OF TREASURIES	81.44	81.15	87.84	87.38
TAXABLE EQUIVALENT	6.36	6.39	7.14	7.17
INSURED REVENUE BONDS	4.54	4.57	5.15	5.18
PERCENT OF TREASURIES	84.22	84.10	91.76	91.44
TAXABLE EQUIVALENT	6.58	6.62	7.46	7.51

AL FUNDS



rningstar, Inc.

EQUITY FUNDS

Leaders Four-week total return	%	Laggards Four-week total return	%
ProFunds UltraBear Investor	21.2	Lexington Troika Russia	–28.5
Potomac U.S./Short	11.2	Fidelity Sel. Energy Serv.	–26.0
Rydex Ursa	10.6	Rydex Energy Svcs. Inv.	–25.6
Comstock Part. Cap. Val. R	7.7	Guinness Mainland China	–24.8
Prudent Bear	7.5	Wright EquiFd.-Mexico	–23.2

Leaders 52-week total return	%	Laggards 52-week total return	%
Transamerica Prem. Sm. Co.	53.1	Lexington Troika Russia	–76.3
Weitz Hickory	53.0	Montgomery Emerg. Asia R	–71.7
Transamerica Prem. Agg. Gr.	46.8	Lex. Crosby Sm. Cap Asia	–71.2
Flag Investors Communs. A	41.6	Guinness Flgt. Asia Sm. Cap	–69.9
Scudder Greater Europe Gr.	39.5	Matthews Korea I	–69.0

EQUITY FUND CATEGORIES

Leaders Four-week total return	%	Laggards Four-week total return	%
International Hybrid	–4.9	Latin America	–18.9
Domestic Hybrid	–5.5	Diversified Emerging Mkts.	–14.9
Utilities	–5.7	Natural Resources	–14.5
Japan	–5.8	Precious Metals	–13.9
Technology	–7.2	Financial	–13.4

Leaders 52-week total return	%	Laggards 52-week total return	%
Communications	24.4	Pacific/Asia ex-Japan	–59.0
Europe	18.9	Diversified Pacific/Asia	–45.0
Utilities	18.0	Precious Metals	–43.3
Large-cap Growth	16.1	Diversified Emerging Mkts.	–41.4
Financial	16.0	Latin America	–36.3

as of market close Wednesday, Aug. 12, 1998, unless otherwise indicated. Industry ude S&P 500 companies only. Fundamentals, technical indicators, Bloomberg money flow analysis, and mutual fund returns are as of Aug. 11. For a more detailed explanation, write to us or E-mail figures@businessweek.com. NA=Not available **Vanguard Index 500 Fund

THE INNOVATIVE SOCIETY

Consider this: An era of new technology, high productivity, fast growth, low inflation, great wealth—and tumultuous economic change, with stock market crashes and unexpected recessions around the globe. Sound like today's '90s? How about the entire century between 1870 and 1970? The broad sweep of modern economic history has been one of innovation and creative destruction. A Special Report by BUSINESS WEEK shows that, for the U.S., the 3%-plus growth of recent years is merely a return to the norm, not an anomaly, paving the way to a 21st Century Economy of profits and prosperity. But getting there will require a rethinking of many of the verities that Washington and global policymakers hold dear. New tools and rules will be needed in the 21st century, and this is true for individuals and companies as well as the nation as a whole.

The U.S. economy is in the early stages of a powerful new wave of innovation, not the later stages of maturity. Information technology already spawns nearly a third of all growth. Biotechnology, the next big thing, is starting to roll out new products. Nanotechnology is poised to create a new generation of miniaturized consumer electronics early in the next decade. The innovation pipeline is full of breakthroughs.

The very process of production is being revolutionized. Virtual integration is quickly replacing vertical integration as corporations use the Net to stitch together a seamless web of global suppliers, manufacturers, distributors, and customers. Take the amazing PalmPilot. The idea originated in a tiny software company, Palm Computing, now owned by 3COM. Palo Alto Design Group in California designed the product and had the parts manufactured in Taiwan. Flextronics, a subcontractor, assembled the parts in Singapore. A brilliant new product, from the minds of young software writers, on sale in less than a year from conception: It is a saga of technological brilliance, risk-taking grit, and global teamwork.

It is a quintessentially American story. Indeed, an innovative, fast-paced economy plays to America's cultural strengths. Flexibility, creativity, and optimism come naturally to an immigrant society with a frontier history, where "new" is better than "old," taking chances is valued over playing it safe, and making money is deemed superior to inheriting it.

RISE AND FALL OF NATIONS

There is, however, a price to be paid. History shows that a high-productivity, fast-growth economy is prone to greater, not fewer, shocks. Nations can rise and fall as they try to adapt to new technologies. It may be that Japan's unexpected decline was the first example of a major industrial country unable to adapt to information-age technologies, turning instead to a beggar-thy-neighbor policy of currency devaluation that helped trigger the collapse of Asian prosperity. And the ultimate success of European unification may well depend on Europe's ability to integrate technology across its borders.

One thing is certain. An innovation-led economy requires new policies and new politics. Traditional liberal or conse ative solutions to problems based on an industrial-era pa digm won't work. The real political split today in the U.S between innovation optimists who see an exuberant, fa growing nation actively bestriding the global scene, and th who subscribe to a cramped view of the economy's poten and the role the country should play around the world.

BOOST TRADE, TRIM TAXES

This is what is needed to promote a pro-innovation gro strategy for the U.S. in the 21st century:

• **TAXES.** Less is more. People must retain the rewards their work and risk. Tax cuts should be focused on creat wealth. That means marginal tax rates should be cut in p erence to rewarding core constituencies. As for the Net should remain totally tax-free for as long as possible.

• **REGULATION.** Less and more are both needed. Entrepren must be free to develop and sell products and services. T means cutting back the jungle of regs and curbing wild giousness. But in the frontier spaces of the Net, just the posite is required. Rules must be drawn up on a whole ra of issues, from electronic commerce to encryption. Private izens get first crack, as they did on the Western frontie they fail, then the Texas Rangers must step in.

• **EDUCATION.** No panic is called for. The same education s tem blamed for the poor economic performance of the '80s supports the exceptional expansion of the '90s. Truth is, th are many education systems in America. University educa is the best in the world. Suburban schools are generally g Urban private schools are good to exceptional. Only u public schools are in serious trouble. The solutions are obvi national standards, charter schools, more money, and, if u public schools still don't work, vouchers. Period.

• **TRADE.** An open, vibrant, global economy is critical. Ri real wages and low unemployment prove it. Pass fast-t But strongly insist that overseas countries open their mar if they want to sell in the U.S.

• **IMMIGRATION.** It's the lifeblood of innovation and entre neurship. Shift to a system favoring education instea family ties. Raise temporary high-tech visa quotas.

• **RESEARCH.** Spend more on basic research in univers and increase support for students in engineering and scie

• **SAFETY NET.** It's a high-risk society. Faster growth a budget surplus will save Social Security and Medicare, medical insurance for all and portable pensions need w

Above all, the U.S. must recognize that an innovatio global economy cannot prosper without sweeping reform ternational financial institutions. Today the IMF is actin the Fed of the 1930s—mistakenly tightening into a d tionary recession, threatening a global credit crunch. T precisely what turned the 1930s into an economic night As the global economy moves into the 21st century, the one mistake that must be avoided at all costs.

ow Clarify helps this man stay on top of payday for 22 million people.

Howard Koenig, Corporate VP of Operations & Client Services, ADP

ADP is the largest payroll processor in the world. Each year customer service reps field some 70 million calls. Leading the company's world-class service initiative is customer champion Howard Koenig. "The only thing we do is service. It's critical to the bottom line. Our focus on serving clients really made Clarify a perfect strategic fit for our company. They came to us and said, 'Let us show you how we can enhance ADP's service.' Other companies came at us from a pure sales angle. We didn't get that sense from Clarify. We got convinced they would partner with us to make us successful. And they did. Faster than we thought possible. Now we're using Clarify globally to gain a competitive edge. Clarify is the heart of our business. Literally."

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